EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	174	564/462	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/08/08 11:05
L2	1	l1 and voglibose	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/08/08 11:05
L3	626	536/1.11	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/08/08 11:05
L4	0	l3 and voglibose	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/08/08 11:06
L5	1862	536/124	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/08/08 11:06
L6	0	l5 and voglibose	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/08/08 11:06
L7	809	voglibose	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/08/08 11:06
L8	792	l7 and (process or method or making or production or synth$)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/08/08 11:07
L9	2	l8 and dihydroxyamin$	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/08/08 11:08
L10	52	l8 and $propanediol	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/08/08 11:08

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 NEWS  3  FEB 27   New STN AnaVist pricing effective March 1, 2006
 NEWS  4  APR 04   STN AnaVist $500 visualization usage credit offered
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 NEWS  6  MAY 11   KOREAPAT updates resume
 NEWS  7  MAY 19   Derwent World Patents Index to be reloaded and enhanced
 NEWS  8  MAY 30   IPC 8 Rolled-up Core codes added to CA/CAplus and
                   USPATFULL/USPAT2
 NEWS  9  MAY 30   The F-Term thesaurus is now available in CA/CAplus
 NEWS 10  JUN 02   The first reclassification of IPC codes now complete in
                   INPADOC
 NEWS 11  JUN 26   TULSA/TULSA2 reloaded and enhanced with new search and
                   and display fields
 NEWS 12  JUN 28   Price changes in full-text patent databases EPFULL and PCTFULL
 NEWS 13  JUl 11   CHEMSAFE reloaded and enhanced
 NEWS 14  JUl 14   FSTA enhanced with Japanese patents
 NEWS 15  JUl 19   Coverage of Research Disclosure reinstated in DWPI

 NEWS EXPRESS  JUNE 30 CURRENT WINDOWS VERSION IS V8.01b, CURRENT
               MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 26 JUNE 2006.

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FILE 'HOME' ENTERED AT 14:53:41 ON 08 AUG 2006

=> file reg
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.21       0.21

FILE 'REGISTRY' ENTERED AT 14:53:51 ON 08 AUG 2006
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STRUCTURE FILE UPDATES: 7 AUG 2006 HIGHEST RN 899508-12-4
DICTIONARY FILE UPDATES: 7 AUG 2006 HIGHEST RN 899508-12-4

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http://www.cas.org/ONLINE/UG/regprops.html

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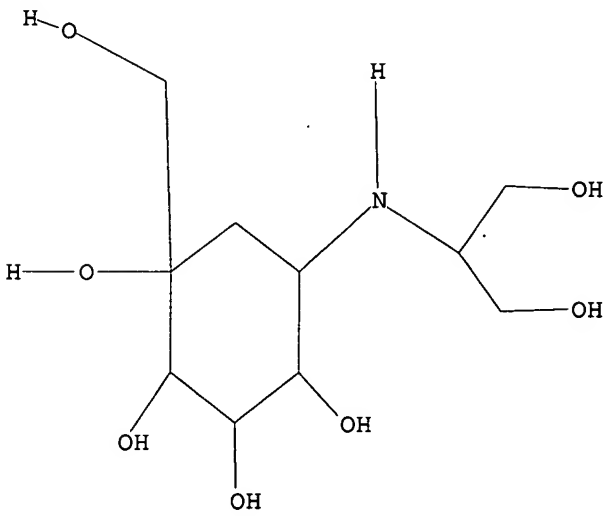
Uploading C:\Program Files\Stnexp\Queries\10509059.str

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

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SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

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PROJECTED ANSWERS:                   0 TO        0

L2             0 SEA SSS SAM L1

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100.0% PROCESSED       49 ITERATIONS                                  6 ANSWERS
SEARCH TIME: 00.00.01

L3             6 SEA SSS FUL L1

=> d scan

L3   6 ANSWERS   REGISTRY  COPYRIGHT 2006 ACS on STN
IN   D-epi-Inositol, 3,4-dideoxy-2-C-(hydroxymethyl)-4-[[2,3,4,5-tetrahydroxy-1-
     (hydroxymethyl)pentyl]amino]- (9CI)
MF   C13 H27 N O10
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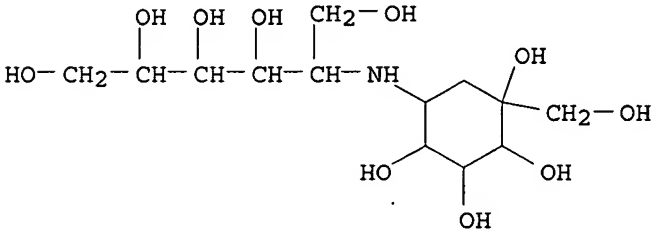

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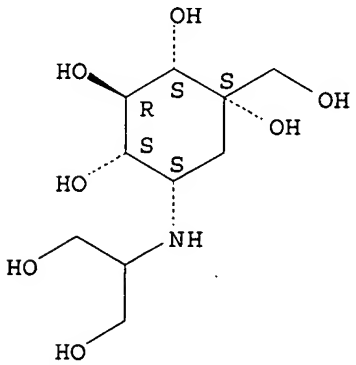
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**


HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3   6 ANSWERS   REGISTRY  COPYRIGHT 2006 ACS on STN
IN   Galactosidase, α-, mixt. with 3,4-dideoxy-4-[[2-hydroxy-1-
     (hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)-D-epi-inositol (9CI)
MF   C10 H21 N O7 . Unspecified
CI   MXS

     CM   1

Absolute stereochemistry.
```



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     CM   2

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end

=> file caplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                   167.38     167.59

FILE 'CAPLUS' ENTERED AT 14:55:04 ON 08 AUG 2006
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FILE LAST UPDATED: 7 Aug 2006  (20060807/ED)

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=> s l3 and voglibose
          209 L3
          187 VOGLIBOSE
L4        158 L3 AND VOGLIBOSE

=> s l4 and (method or process or production or synthe? or making)
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      1290013 METHODS
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                (METHOD OR METHODS)
      2281447 PROCESS
      1548546 PROCESSES
      3406581 PROCESS
                (PROCESS OR PROCESSES)
       602927 PRODUCTION
         3190 PRODUCTIONS
       605261 PRODUCTION
                (PRODUCTION OR PRODUCTIONS)
       952648 PRODN
          530 PRODNS
       952828 PRODN
                (PRODN OR PRODNS)
      1301253 PRODUCTION
                (PRODUCTION OR PRODN)
      2094137 SYNTHE?
       284834 MAKING
           33 MAKINGS
       284861 MAKING
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(MAKING OR MAKINGS)
L5 55 L4 AND (METHOD OR PROCESS OR PRODUCTION OR SYNTHE? OR MAKING)

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2913888 OXID?
L6 13 L5 AND OXID?

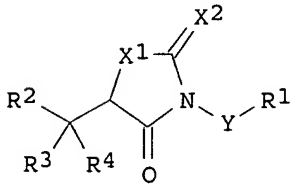
=> dis l6 1-13 bib abs hitstr

L6 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2006:367143 CAPLUS
DN 144:412493
TI Rhodanine derivatives as PPAR receptor modulators and their preparation, pharmaceutical compositions and use for treatment and prophylaxis of various diseases
IN Sarshar, Sepehr; Marappan, Subrumanian
PA Auspex Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 106 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2006041921	A2	20060420	WO 2005-US35832	20051004

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRAI US 2004-616574P P 20041005
OS MARPAT 144:412493
GI



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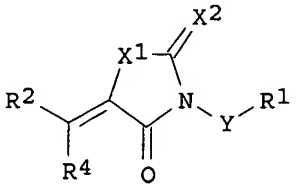

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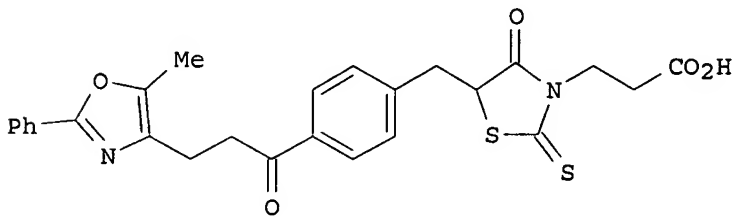


III

AB Processes for the preparation of compds. of formulas I and II are

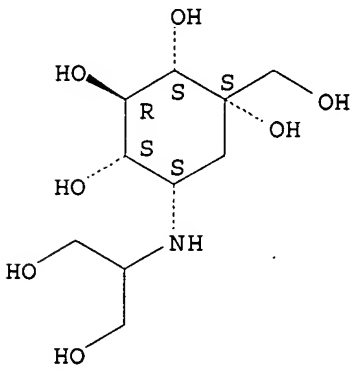
described. These compds. can be used as PPAR modulators and for the treatment and/or management of cancer, inflammation, cellular differentiation and proliferation, wound healing, metabolism of lipids and carbohydrates, obesity, diabetes, and energy homeostasis. Compds. of formula I and II wherein X1 and X2 are independently O, S, or NH; Y is (un)substituted C1-10 alkyl; R1 is (un)substituted C5-11 oxocycloalkenyl, (R9CO)(R10CO)CH, or (un)substituted dioxodioxanyl; R9 and R10 are independently OH, alkoxyl, aryloxy, NH2, alkylamino, arylamino, N-aryl-N-alkylamino, -NHNH2, alkylhydrazino, arylhydrazino, N-aryl-N-alkylamino, NHOH and derivs., alkyl, or aryl; R2 and R3 are independently H, halo, or alkyl; R4 is substituted aryl and heteroaryl; and their pharmaceutically acceptable salts, and prodrugs thereof are claimed. Example compound III was prepared by addition of methyllithium to 4-(diethoxymethyl)benzaldehyde to give the corresponding alc., which was oxidized to give 4-(diethoxymethyl)acetophenone, which underwent acylation with di-Et carbonate; the resulting 2-[4-(diethoxymethyl)benzoyl]acetate underwent alkylation with 4-chloromethyl-5-methyl-2-phenyloxazole followed by decarboxylation to give 4-[3-(5-methyl-2-phenyl-4-oxazolyl)propionyl]benzaldehyde, which underwent condensation with rhodanine-N-propionic acid to give 4-[3-(5-methyl-2-phenyl-4-oxazolyl)propionyl]benzylidene-3-(β-carboxyethyl)rhodanine, which underwent hydrogenation to give example compound III. The invention compds. were evaluated for their PPAR-γ modulating activity. From the assay, it was determined example compound III exhibited an EC50 0.127 μM.

IT 83480-29-9, Voglibose
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of rhodanine derivs. as PPAR receptors modulators useful in treatment and prophylaxis of diseases)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L6 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2006:283034 CAPLUS

DN 144:445125

TI Control of plasma glucose with alpha-glucosidase inhibitor attenuates oxidative stress and slows the progression of heart failure in mice

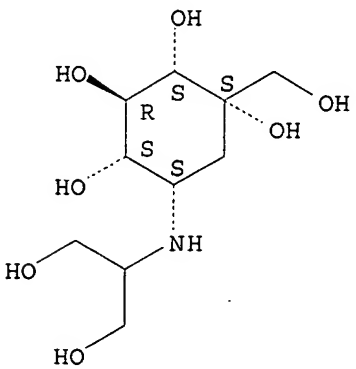
AU Liao, Yulin; Takashima, Seiji; Zhao, Hui; Asano, Yoshihiro; Shintani, Yasunori; Minamino, Tetsuo; Kim, Jiyoong; Fujita, Masashi; Hori, Masatsugu; Kitakaze, Masafumi

CS Department of Cardiovascular Medicine, Osaka University Graduate School of Medicine, Suita, Osaka, 565-0871, Japan

SO Cardiovascular Research (2006), 70(1), 107-116

CODEN: CVREAU; ISSN: 0008-6363
PB Elsevier B.V.
DT Journal
LA English
AB It was suggested that reduction in glucose levels contributes to the prolongation of life span of rodents in conjunction with restricted food intake, and hyperglycemia was confirmed as a risk factor for cardiovascular disease (CVD), raising the possibility that better glycemic control could slow the progression of CVD. This study was designed to determine whether impaired glucose tolerance develops during the progression of cardiac hypertrophy and heart failure, and whether tight glycemic control could reduce the severity of heart failure. In male C57BL/6 mice, transverse aortic constriction (TAC) was employed to create cardiac hypertrophy and heart failure. The involvement of NADPH in TAC mice and cardiac myocytes in the neonatal rat was investigated. The random-fed blood plasma glucose concentration was higher in TAC mice, and it was reduced to about 100 mg/dL by voglibose (an alpha-glycosidase inhibitor). Four weeks after TAC, both the heart weight/body weight ratio and the lung weight/body weight ratio were lower in the voglibose group than in the TAC group. Echocardiog. and invasive hemodynamic examination showed improvement of left ventricular function in voglibose-treated mice. Voglibose treatment decreased the myocardial expression of an NADPH oxidase subunit (p47phox). Glucose dose-dependently increased both neonatal rat myocyte protein synthesis and the expression of p47phox protein, while apocynin (an NADPH oxidase inhibitor) blocked the enhancement of protein synthesis by high glucose. Improvement of glycemic control through voglibose therapy inhibited cardiac remodeling by decreasing myocardial oxidative stress in mice with cardiac pressure overload.
IT 83480-29-9, Voglibose
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(glycemic control with voglibose attenuates oxidative stress and slows progression of heart failure)
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

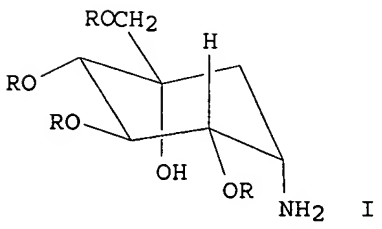
L6 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2005:472107 CAPLUS
DN 143:26811
TI Process for the preparation of 1,2,3,4-cyclohexanetetrol derivatives as intermediates for preparation of voglibose

IN Khanduri, Chandra Has; Babu, Jayachandra Suresh; Ray, Purna Chandra; Shah, Jigar Bhaskarbhai; Kumar, Yatendra
PA Ranbaxy Laboratories Limited, India
SO PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2005049547	A1	20050602	WO 2004-IB3782	20041118

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI IN 2003-DE1448 A 20031121
IN 2004-DE1507 A 20040816
OS CASREACT 143:26811; MARPAT 143:26811
GI



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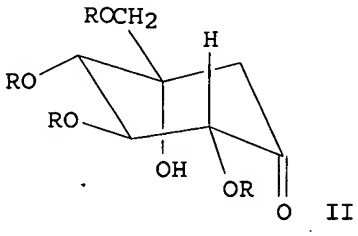


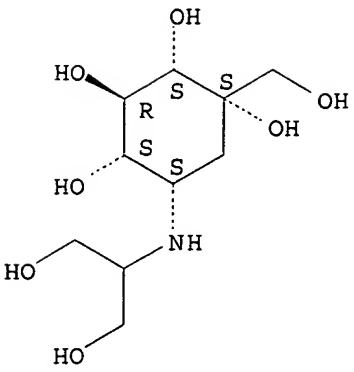
II

AB The aminocyclohexanetetrol derivs. I (R = H, protective group), intermediates for voglibose, were prepared by reaction of the 2,3,4,5-tetrahydroxycyclohexanone derivs. II with ammonium acetate, ammonium formate or a mixture thereof and one or more reducing agents. Thus, II (R = Bn), prepd from the 6,6-dichloro derivative, underwent reductive amination with ammonium acetate and sodium cyanoborohydride to give I (R = Bn), which reacted with with 1,3-dihydroxyacetone followed by hydrogenolysis to give voglibose.

IT 83480-29-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(process for preparation of 1,2,3,4-cyclohexanetetrol derivs. as intermediates for voglibose)

RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2005:14148 CAPLUS
DN 142:107413
TI Combination therapy for the treatment of dyslipidemia
IN Erondu, Ngozi E.; Fong, Tung M.; MacNeil, Douglas J.; Van Der Ploeg, Leonardus H. T.
PA Merck & Co., Inc., USA
SO PCT Int. Appl., 106 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005000217	A2	20050106	WO 2004-US17120	20040602
	WO 2005000217	A3	20050407		
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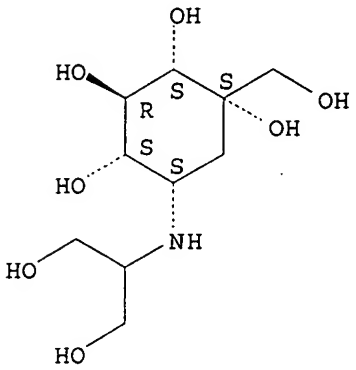
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1635813	A2	20060322	EP 2004-753858	20040602
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
	US 2006148721	A1	20060706	US 2005-555194	20051101
PRAI	US 2003-476387P	P	20030606		
	WO 2004-US17120	W	20040602		

OS MARPAT 142:107413
AB The invention relates to compns. comprising an anti-obesity agent and an anti-dyslipidemic agent useful for the treatment of dyslipidemia, dyslipidemia associated with obesity and dyslipidemia-related disorders. The invention further relates to methods of treating or preventing obesity, and obesity-related disorders, in a subject in need thereof by administering a composition of the present invention. The invention further provides pharmaceutical compns., medicaments, and kits useful in carrying out these methods.
IT 83480-29-9, Voglibose
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combination therapy for treatment of dyslipidemia)

RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



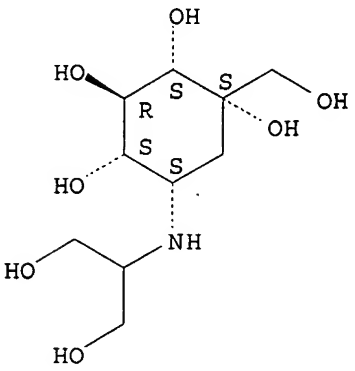
L6 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:1124581 CAPLUS
DN 142:69181
TI Combination therapy for the treatment of hypertension
IN Fong, Tung M.; Erondu, Ngozi E.; Macneil, Douglas J.; Mcintyre, James H.; Van Der Ploeg, Leonardus H. T.
PA Merck & Co., Inc., USA
SO PCT Int. Appl., 99 pp.
CODEN: PIXXD2
DT Patent.
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004110368	A2	20041223	WO 2004-US17090	20040602
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1635773	A2	20060322	EP 2004-753832	20040602
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
	US 2006160834	A1	20060720	US 2005-559111	20051202
PRAI	US 2003-476390P	P	20030606		
	WO 2004-US17090	W	20040602		

OS MARPAT 142:69181
AB The present invention relates to compns. comprising an anti-obesity agent and an anti-hypertensive agent useful for the treatment of hypertension, hypertension associated with obesity, and hypertension-related disorders. The present invention further relates to methods of treating or preventing obesity, and obesity-related disorders, in a subject in need thereof by administering a composition of the present invention. The present invention further provides for pharmaceutical compns., medicaments, and kits useful in carrying out these methods.
IT 83480-29-9, Voglibose

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combination therapy of hypertension and hypertension-related disorders using antiobesity agent and antihypertensive agent and other agents and antihypertensive agent)
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L6 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2003:777746 CAPLUS
DN 139:277115
TI Process for preparation of voglibose
IN Shogaki, Takeshi; Kakita, Takao; Yagi, Suguru
PA Sawai Pharmaceutical Co., Ltd., Japan
SO PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003080561	A1	20031002	WO 2002-JP10687	20021015
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2002344083	A1	20031008	AU 2002-344083	20021015
	US 2005165257	A1	20050728	US 2003-509059	20021015
PRAI	JP 2002-88321	A	20020327		
	WO 2002-JP10687	W	20021015		

OS CASREACT 139:277115; MARPAT 139:277115
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention provides a process by which voglibose

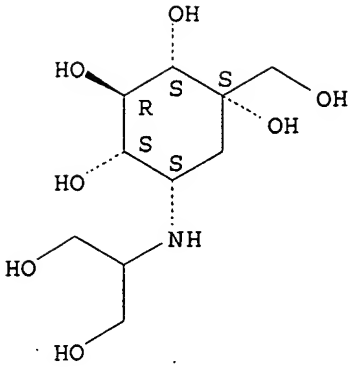
can be safely and easily prepared at a low cost; intermediates favorably usable in the process; and a process for preparation of the intermediates, specifically, inositol derivs. represented by the general formula (I) (wherein Prt is a hydroxyl-protecting group); a process for the preparation of the inositol derivs. which comprises dihydroxyaminating a cyclohexanone compound represented by the general formula (II) (wherein Prt is as defined above) with a dihydroxyaminating agent and a reducing agent; and a process for the preparation of voglibose represented by formula (III) which comprises oxidizing an inositol derivative of the general formula I and deblocking the resulting inositol compound Voglibose is an α-glucosidase inhibitor and useful for the treatment of diabetes. Thus, a suspension of 2.0 g Me 6-deoxy-2,3,4-tri-O-benzyl-α-D-xylo-5-hexenopyranoside in a mixture of 60 mL dioxane and 30 mL H2O was heated in the presence of 39 mg PdCl2 at 45° with stirring to give, after workup and crystallization from hexane, 72.4% [2S-(2α,3β,4α,5.alpha.β)]-5-hydroxy-2,3,4-tris(benzyloxy)cyclohexanone (IV) which (4.33 g) was dissolved in 90 mL toluene, cooled to -78°, treated dropwise with a THF solution of 1.0 M vinylmagnesium bromide (50 mL), stirred at -78° for 2 h and at room temperature for 1 h, and carefully treated with 100 mL 1 M aqueous HCl solution, to give after workup and silica gel chromatog., a mixture of 3-deoxy-2-C-ethenyl-1,5,6-tri-O-benzyl-D-epi-inositol and 3-deoxy-2-C-ethenyl-1,5,6-tri-O-benzyl-D-myo-inositol (V) in 65.8% yield. V (2.99 g) was dissolved in 15 mL DMSO and 5.43 mL Et3N, treated dropwise with a solution of 3.10 g sulfur trioxide-pyridine complex in 15 mL DMSO, stirred at room temperature for 1 h to give, after workup and silica gel chromatog., 83.7% II (Prt = benzyl) which (1.50 g) was stirred with 2-amino-1,3-propanediol in 25 mL dry MeOH at room temperature for 20 h, treated with 742 mg NaBH4 under ice-cooling, and stirred at room temperature for 16 h to give, after workup and silica gel chromatog., 72.6% III (Prt = benzyl) (VI). A solution of 700 mg VI in 30 mL CH2Cl2/MeOH (4/1) underwent ozonolysis at -78° for .apprx.4 h, treated with 198 mg NaBH4, stirred at room temperature for 1 h, and acidified to pH 4 by adding 1 M aqueous HCl solution to give, after silica gel chromatog., 85.5% I (Prt = benzyl) which (100 mg) was dissolve din 1.9 mL MeOH, successively treated with 0.1 mL 90% formic acid and 20 mg palladium black, stirred at 60° for 6 h, and suction-filtered to remove the catalyst followed by washing the catalyst with 3 mL MeOH/H2O (1/1). Evaporation of the combined solvent from the filtrate and the washing under reduced pressure, column chromatog. purification using Dowex 50WX8 and Amberlite CG-50, and crystallization from ethanol gave 65.0% III (voglibose).

IT 83480-29-9P, Voglibose
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of voglibose as α-glucosidase inhibitor for treatment of diabetes in multisteps from Me 6-deoxy-2,3,4-tri-O-benzyl-α-D-xylo-5-hexenopyranoside)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

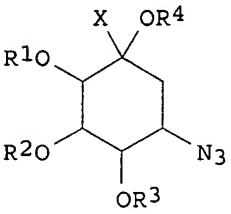


RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

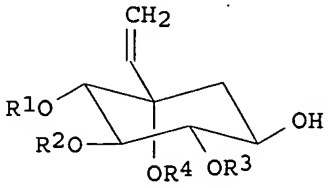
L6 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2003:386729 CAPLUS
DN 138:402036
TI Preparation of valiolamine and its intermediates
IN Masagaki, Takeshi; Yagi, Takashi; Kakita, Takao
PA Sawai Pharmaceutical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2003146957	A2	20030521	JP 2001-345259	20011109
PRAI JP 2001-345259		20011109		

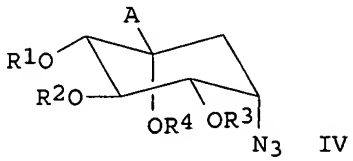
OS MARPAT 138:402036
GI



I



III



IV

AB Cyclohexane derivs. I (R1-R4 = H, protective group; X = CH:CH2, CH2OH), useful as intermediates for valiolamine (II), are claimed. Also claimed is a method for preparation of II by (1) azidation of alc. III (R1-R4 = H, protective group), (2) oxidn. of the resulting IV (A = CH:CH2; R1-R4 = same as in III), and (3) reduction of the resulting IV (A = CH2OH; R1-R4 = same as above). Preparation of II from Me 6-deoxy-2,3,4-tris-O-(phenylmethyl)-α-D-xylo-5-hexenopyranoside with 5 steps was shown. Preparation of voglibose from II was also shown.

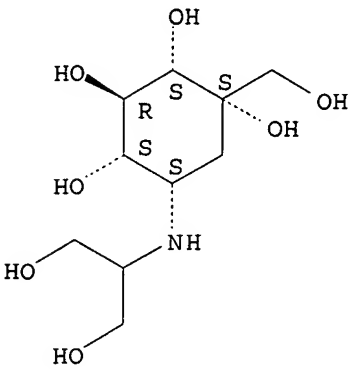
IT 83480-29-9P, Voglibose

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(preparation of valiolamine as intermediate for voglibose from deoxyethenylmyoinositols)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L6 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:888532 CAPLUS

DN 137:358192

TI Rapidly disintegratable solid preparation

IN Ohkouchi, Kazuhiro; Koyama, Hiroyoshi

PA Takeda Chemical Industries, Ltd., Japan

SO PCT Int. Appl., 32 pp.
CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

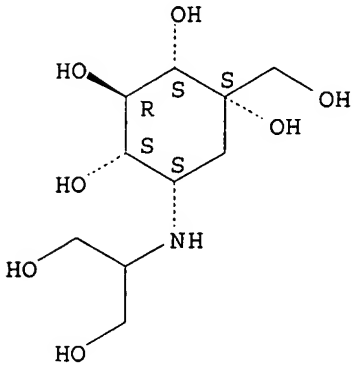
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002092058	A1	20021121	WO 2002-JP4641	20020514
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	JP 2003034655	A2	20030207	JP 2002-139116	20020514
PRAI	JP 2001-145215	A	20010515		

AB A rapidly disintegratable solid preparation comprises (1) an active ingredient, (2) a sugar and/or a sugar alc., (3) a cellulose derivative, and (4) a dissoln. aid. The solid preparation can be prepared by a dry method even under a low compression pressure and has a practically acceptable hardness and excellent properties, e.g., rapid disintegration, excellent dissoln. control, and less trouble in manufacturing For example, granules were formulated containing manidipine hydrochloride, starch, hydroxypropyl cellulose, and iron oxide. Sep., granules were formulated containing mannitol, hydroxypropyl cellulose, citric acid, and iron oxide. The both granules, crystalline cellulose, aspartame, and Mg stearate were blended and compressed to give tablets.

IT 83480-29-9, Voglibose
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(excipients for manufacturing rapidly disintegratable solid prepns.)
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

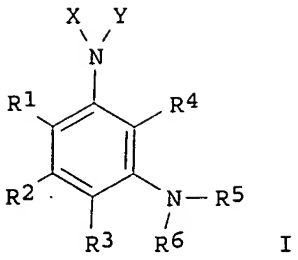


RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2002:637641 CAPLUS
DN 137:169309
TI Preparation of substituted aminobenzene derivatives as glucocorticoid receptor modulators
IN Link, James T.; Sorensen, Bryan K.; Patel, Jyoti R.; Arendsen, David L.; Li, Gaoquan
PA Abbott Laboratories, USA
SO PCT Int. Appl., 272 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002064550	A1	20020822	WO 2002-US4501	20020212
	WO 2002064550	C1	20021114		
	W: CA, JP, MX				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	CA 2438480	AA	20020822	CA 2002-2438480	20020212
	EP 1363876	A1	20031126	EP 2002-714910	20020212
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
	JP 2005510450	T2	20050421	JP 2002-564483	20020212
PRAI	US 2001-783636	A	20010214		
	US 2002-72548	A	20020208		
	WO 2002-US4501	W	20020212		

OS MARPAT 137:169309
GI



I

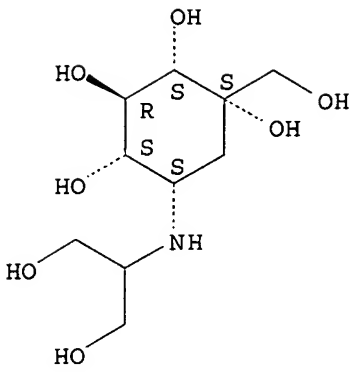
AB Gen, hydroxyalkyl, substituted amine; R4 issubstituted aminobenzenes I were prepared and are novel glucocorticoid receptor modulators and are useful for treating type II diabetes in a mammal, wherein R1-R3 are each independently hydrogen, alkoxycarbonyl, alkoxy, alkoxyalkyl, alkyl, alkylcarbonyl, carboxy, halogen, hydroxyalkyl, substituted amine; R4 is hydrogen, alkenyl, alkoxy, alkoxyalkenyl, alkoxyalkoxy, alkoxyalkyl, alkoxyalkynyl, alkoxycarbonyl, alkoxycarbonylalkoxy, alkoxycarbonylalkenyl, alkoxycarbonylalkyl, alkoxycarbonylalkynyl, alkyl, alkylcarbonyl, alkylcarbonylalkenyl, alkylcarbonylalkoxy, alkylcarbonylalkyl, alkylcarbonylalkynyl, alkynyl, carboxy, carboxyalkenyl, carboxyalkyl, carboxyalkynyl, haloalkoxy, haloalkyl, haloalkenyl, haloalkynyl, halogen, hydroxyalkyl, substituted amine; R5 is hydrogen, alkyl; R6 is hydrogen, alkoxycarbonyl, alkoxysulfonyl, alkyl, alkylcarbonyl, alkylsulfonyl, arylalkoxycarbonyl, arylalkylcarbonyl, arylalkylsulfonyl, arylcarbonyl, arylsulfonyl, cycloalkylcarbonyl, cycloalkylalkylcarbonyl, cycloalkylsulfonyl, cycloalkylalkylsulfonyl, heterocyclecarbonyl, heterocyclealkylcarbonyl, heterocyclesulfonyl, heterocyclealkylsulfonyl, amide, aminosulfonyl; X and Y are independently heteroatom-containing hydrocarbon. Thus, N-[3-(dibenzylamino)-2-methylphenyl]ethanesulfonamide was prepared as glucocorticoid receptor modulator. A method of treating symptoms related to type II diabetes wherein said symptoms are selected from the group consisting of hyperglycemia, hyperinsulinemia, inadequate, glucose clearance, obesity, hypertension and high glucocorticoid levels in a mammal comprising administering a therapeutically effective amount of a compound of title compds. A method of treating diseases associated with an excess or deficiency of glucocorticoids, said diseases selected from the group consisting of diabetes, obesity, Syndrome X, Cushing's Syndrome, Addison's disease, inflammatory diseases such as asthma, rhinitis and arthritis, allergy, autoimmune disease, immunodeficiency, anorexia, cachexia, bone loss or bone frailty, and wound healing comprising administering a therapeutically effective amount of a compound of title compds.

IT 83480-29-9, Voglibose
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(preparation of substituted aminobenzene derivs. as glucocorticoid receptor modulators)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2002:71854 CAPLUS
DN 136:123667
TI Antidiabetic combinations containing enzymic nitric oxide donor
IN Szilvassy, Zoltan; Tosaki, Arpad; Nemeth, Jozsef; Kovacs, Peter; Pankucsi, Csaba; Hernadi, Ferenc; Ferninandy, Peter
PA Keri Pharma Kft., Hung.
SO PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002005795	A2	20020124	WO 2001-HU79	20010713
	WO 2002005795	A3	20021219		
	WO 2002005795	B1	20030130		
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2415392	AA	20020124	CA 2001-2415392	20010713
	EP 1303304	A2	20030423	EP 2001-954229	20010713
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2004503585	T2	20040205	JP 2002-511728	20010713
	US 2004068005	A1	20040408	US 2003-332946	20031017
PRAI	HU 2000-2628	A	20000714		
	WO 2001-HU79	W	20010713		

AB Pharmaceutical combinations for treatment and/or prevention of all sorts, periods and complications of diabetes mellitus in mammals, thus including the pre-diabetic diseases and their complications, optionally including furthermore ischemic heart disease comprising an ED of at least one enzymic nitric oxide (NO) donor active ingredient and optionally comprising an ED of at least one antidiabetic active ingredient, and further optionally comprising usual pharmaceutically acceptable carriers and/or other auxiliaries. The combination may consist of more than one pharmaceutical compns. The EDs related to the new insulin-sensitizing effect are considerably lower than the usual doses related to the known effect of most active substances dues to metabolic effects that influence insulin sensitivity in healthy and insulin resistant mammals. The usual dose of NO-donors is necessary when the patient has also ischemic heart disease. Preferred antidiabetics include insulin, a thiazolidinedion, a

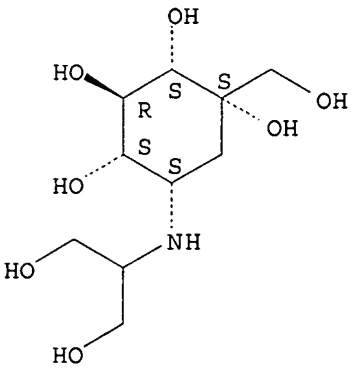
biguanide derivative, an α-glucosidase-inhibitor, an α2-adrenergic-antagonist and/or a sulfonamide, preferably a sulfonylurea. Preferred enzymic NO donors are nitroglycerin, racemic isosorbide mononitrate, and/or its stereoisomers, racemic isosorbide dinitrate and/or its stereoisomers, erythrityl tetranitrate, pentaerythritol-tetranitrate, methylpropyl-propanediol-dinitrate, propatyl nitrate, trolnitrate, tenitramine and/or nicorandil. The invention includes methods of treatment and processes to prepare the compns.

IT 83480-29-9, Voglibose
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antidiabetic combinations containing enzymic nitric oxide donor)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L6 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:51257 CAPLUS

DN 136:123595

TI A combination of phosphonate or phosphorodiamidate FBPase inhibitors and antidiabetic agents useful for the treatment of diabetes

IN Van Poelje, Paul D.; Erion, Mark D.; Fujiwara, Toshihiko

PA Metabasis Therapeutics, Inc., USA; Sankyo Company, Ltd.

SO PCT Int. Appl., 392 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

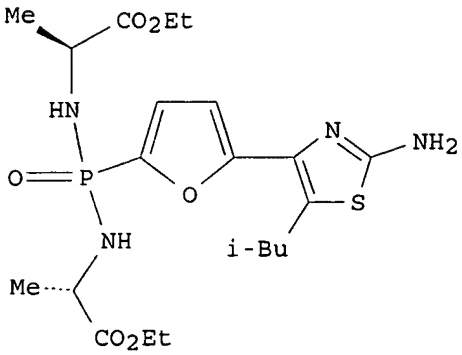
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002003978	A2	20020117	WO 2001-US21557	20010705
	WO 2002003978	A3	20031016		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2412142	AA	20020117	CA 2001-2412142	20010705
	US 2003073728	A1	20030417	US 2001-900364	20010705
	BR 2001012212	A	20031230	BR 2001-12212	20010705
	EP 1372660	A2	20040102	EP 2001-952530	20010705

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

	JP 2004508297	T2	20040318	JP 2002-508433	20010705
	CN 1599612	A	20050323	CN 2001-814924	20010705
	NZ 523227	A	20050429	NZ 2001-523227	20010705
	ZA 2003000044	A	20040506	ZA 2003-44	20030102
	NO 2003000034	A	20030305	NO 2003-34	20030103
	AU 2006201410	A1	20060427	AU 2006-201410	20060404
PRAI	US 2000-216531P	P	20000706		
	US 2001-900364	A	20010705		
	US 2000-215126P	P	20000629		
	AU 2001-73271	A3	20010705		
	WO 2001-US21557	W	20010705		

OS MARPAT 136:123595

GI



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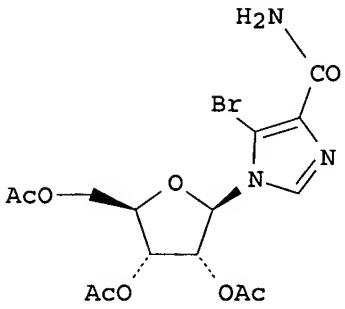


II

AB A combination therapy of at least one FBPase inhibitor ((R1Y)2P(O)M and R14C(O)(CR12R13)nN(R18)P(O)(NR15R16)M; e.g. 2-amino-5-propylthio-4-(5-phosphono-2-furanyl)thiazole monohydrobromide and 2-amino-5-isobutyl-4-[2-[N,N'-bis[(S)-1-(ethoxycarbonyl)ethyl]phosphonodiamido]-5-furanyl]thiazole (shown as I)) and at least one other antidiabetic agent (insulin secretagogue; e.g. glyburide, a sulfonylurea) is disclosed. (R1Y)2P(O)M and R14C(O)(CR12R13)nN(R18)P(O)(NR15R16)M are converted in vivo or in vitro to MPO32-, which inhibit FBPase; the substituents are defined in the claims. General methods and about 15 specific example prepns. of the phosphorus compds. are included but no methods of preparation are claimed. In the biol. examples, data is presented for the following for selected phosphorus compds. and other materials: inhibition of human liver FBPase, inhibition of rat liver and mouse liver FBPase, inhibition of gluconeogenesis by an FBPase inhibitor in rat hepatocytes, inhibition of glucose prodn. and elevation of fructose-1,6-bisphosphate levels in rat hepatocytes treated with FBPase inhibitors, anal. of hepatic and plasma drug metabolite levels, blood glucose, and hepatic fructose 1,6-bisphosphate levels after administration of compound A (shown as II) p.o. to normal fasted rats, anal. of hepatic and plasma drug levels after administration of compds. i.p. to normal fasted rats, oral bioavailability determination of two compds. and oral glucose lowering activity of two compds. For insulin secretagogues: insulin release from pancreatic islets, glucose lowering in the fasted rat, i.v. glucose tolerance in the fasted rat, oral glucose tolerance in the Zucker diabetic fatty rat, insulin secretion in the rat, inhibition of KATP-channels in mouse pancreatic beta-cells, and sulfonylurea receptor binding. Also included are: inhibition of dipeptidyl peptidase IV (DPP-IV inhibitors), alpha-glucosidase assay, glycogen phosphorylase assay, assay of glucose 6-phosphatase inhibitors, glucagon antagonist assay, amylin agonist assay, fatty acid oxidn . inhibitor assay, glucose lowering in the db/db mouse (FBPase inhibitor), glucose lowering in the ZDF rat, acute combination treatment of an insulin

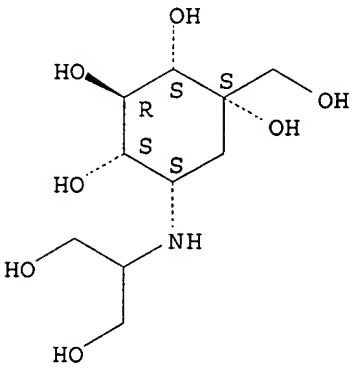
secretagogue and an FBPase inhibitor in the ZDF rat, chronic combination treatment of an insulin secretagogue and an FBPase inhibitor in the ZDF rat, acute combination treatment of insulin and an FBPase inhibitor in db/db mice, beneficial effect of chronic combination treatment of insulin and an FBPase inhibitor in db/db mice, and beneficial effect of chronic combination treatment of insulin and an FBPase inhibitor in db/db Mice. Also included are: acute combination treatment of insulin and an FBPase inhibitor in the Goto-Kakizaki rat, acute combination treatment of a biguanide and an FBPase inhibitor in db/db mice, acute combination treatment of an alpha glucosidase inhibitor and an FBPase inhibitor in Goto-Kakizaki rats, acute combination treatment of a glycogen phosphorylase inhibitor and an FBPase inhibitor in db/db or ob/ob mice, acute combination treatment of a glucose-6-phosphatase inhibitor and an FBPase inhibitor in db/db or ob/ob mice, acute combination treatment of an FBPase inhibitor and an amylin agonist, chronic combination treatment of a fatty acid oxidn. inhibitor and an FBPase inhibitor in the streptozotocin-induced diabetic rat.

IT 83480-29-9, Voglibose
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(insulin secretagogue; combination of phosphonate or phosphorodiamidate FBPase inhibitors and antidiabetic agents useful for treatment of diabetes)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L6 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:816444 CAPLUS

DN 135:352829

TI Combination therapeutic compositions containing benzene compounds

IN Jaen, Juan C.; Chen, Jin-Long

PA Tularik Inc., USA

SO PCT Int. Appl., 57 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001082916	A2	20011108	WO 2001-US14393	20010502
	WO 2001082916	A3	20020704		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,

SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

	US 2002037928	A1	20020328	US 2001-847887	20010502
	US 6653332	B2	20031125		
	US 2004259918	A1	20041223	US 2003-456932	20030605
	US 2006035928	A1	20060216	US 2005-258817	20051026
PRAI	US 2000-201613P	P	20000503		
	US 2001-847887	A1	20010502		
	US 2003-456932	A1	20030605		

OS MARPAT 135:352829

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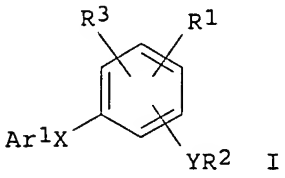


I

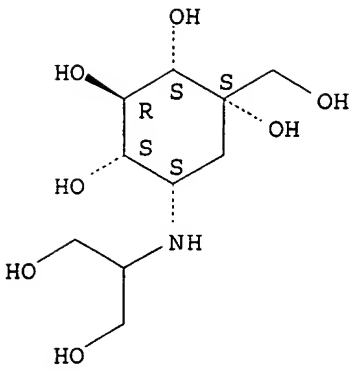
AB The present invention provides pharmaceutical compns. and methods for the treatment of diabetes mellitus using combination therapy. The compns. relate to a benzene compound and an antidiabetic agent such as sulfonylureas, biguanides, glitazones, α-glucosidase inhibitors, potassium channel antagonists, aldose reductase inhibitors, glucagon antagonists, activators of RXR, insulin therapy or other anti-obesity agent. The methods include the administration of the combination of benzene compound with antidiabetic agent where the two components are delivered in a simultaneous manner, where the benzene compound is administered first, followed by the antidiabetic agent, as well as wherein the antidiabetic agent is delivered first followed by the benzene compound For example, the benzene compound (I) was synthesized using a 5-amino-2-(3-chloro-5-pyridyloxy)benzonitrile (0.457 g) in methylene chloride to which was added 2,4-dichlorobenzenesulfonyl chloride (0.456 g), followed by pyridine (150 μL). The reaction progress was monitored by TLC, and upon completion the solvent was removed under vacuum. The resulting residue was partitioned between methylene chloride and water. The organic layer was drawn off and concentrated The residue was triturated with ether to provide 0.447 g of I as a white solid, m.p. 154-156°.

IT 83480-29-9, Voglibose
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(benzene compds. in combination therapy for diabetes and diabetes-related disorders)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



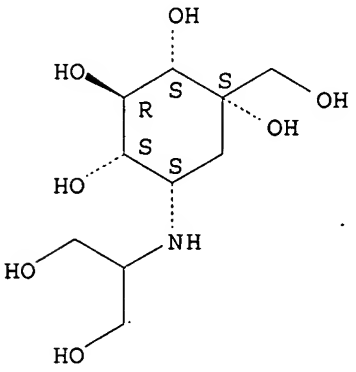
L6 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1994:612976 CAPLUS
DN 121:212976
TI Tablets with improved abrasion resistance and method to produce them
IN Matoba, Hiroshi; Koyama, Hiroyoshi; Kikuta, Junichi
PA Takeda Chemical Industries, Ltd., Japan
SO Eur. Pat. Appl., 17 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 610854	A1	19940817	EP 1994-101809	19940207
	EP 610854	B1	20000419		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
	JP 06293634	A2	19941021	JP 1994-23269	19940124
	JP 2647338	B2	19970827		
	US 5456920	A	19951010	US 1994-187908	19940128
	NO 9400373	A	19940811	NO 1994-373	19940204
	AT 191846	E	20000515	AT 1994-101809	19940207
	CN 1106652	A	19950816	CN 1994-101367	19940208
	CA 2115308	AA	19940811	CA 1994-2115308	19940209
	CA 2115308	C	20040511		
	FI 9400585	A	19940811	FI 1994-585	19940209
PRAI	JP 1993-45958	A	19930210		

AB A compression-moldable composition comprising an active ingredient, an excipient, and an oily or fatty substance having a m.p. of .apprx.20-90° is compression molded into uncoated tablets without coating to improve the abrasion resistance. The oily or fatty substance includes a higher fatty acid or a salt thereof, a wax, a fatty acid ester, a hardened oil, a polyalkylene oxide, etc., in an amount of 0.01-10 weight%. The composition may comprise (1) a granulated powder containing the active ingredient and the excipient, and the powdery or granular oily or fatty substance having a lower m.p., or (2) a granulated powder containing the active ingredient, the excipient, and the oily or fatty substance. Compression molding of the composition improves the abrasion resistance of the tablet and inhibits the development of powder by wearing or abrasion even when the oily or fatty substance is used in a small amount of 0.1-0.5 weight%. Thus, 2-(7-chloro-1,8-naphthyridin-2-yl)-3-(1,4-dioxa-8-azaspiro[4.5]dec-8-yl)carbonylmethylisoindolin-1-one 32.0 was granulated with lactose 756.8, corn starch 144.0, and 6% aqueous hydroxypropylcellulose 451.2 g at 70° in a fluidized bed, the mixture was dried and comminuted, and 840.0 g was combined with PEG 6000 3.6 and Mg stearate 66.4 g and compression molded in a rotary tablet machine to form 130.0-mg tablets 2.5 mm thick. Very little powder was formed by shaking the tablets for 30 min.

IT 83480-29-9, Voglibose
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tablets with improved abrasion resistance containing oils or fats)
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



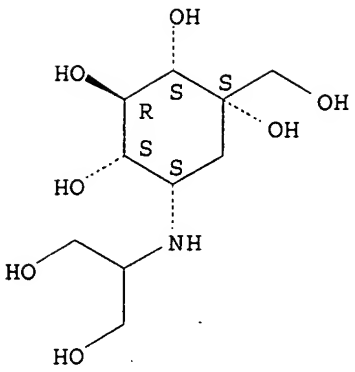
=> dis l5 1-55 bib abs hitstr

L5 ANSWER 1 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2006:669521 CAPLUS
DN 145:103918
TI Preparation of voglibose crystals
IN Ji, Xiaoming; Yao, Yong; Zhuo, Zhonghao; Zheng, Yunman; Cui, Jiajia
PA Shanghai Techwell Biopharmaceutical Co., Ltd., Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 11 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1796396	A	20060705	CN 2004-10093524	20041224
PRAI	CN 2004-10093524		20041224		

AB The invention relates to voglibose crystal which has characterized peaks on 2θ angle: 13.4, 14.7, 15.4, 17.4, 20.0, 21.8, 23.3, 24.5, 26.0 and 27.1±0.2°, and m.p. of 164-168°. The invention also relates to pharmaceutical composition comprising the above voglibose crystal and use thereof for treating diabetes. The invention further relates to preparation method for voglibose crystal which comprises dissolving voglibose in water, freezing to (-60)-0°, freeze drying, adding ethanol 2-200 mL/g, heating to 35-90°, cooling to obtain precipitated voglibose crystal.
IT 83480-29-9P, Voglibose
RL: PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of voglibose crystals for treatment of diabetes)
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



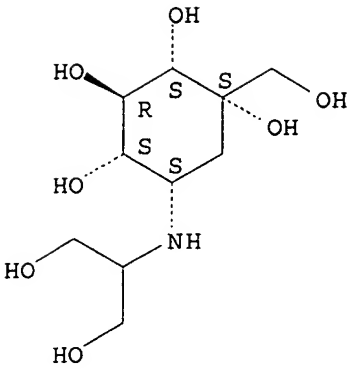
L5 ANSWER 2 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2006:542611 CAPLUS
DN 145:21196
TI Treatment of diabetes and diabetes-related conditions with glycogen phosphorylase inhibitors
IN Thomas, Gerard Hugh; Thomsen, Mikael
PA Prosidion Ltd., UK
SO PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006059163	A1	20060608	WO 2005-GB50232	20051202

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRAI US 2004-632591P P 20041202
OS CASREACT 145:21196
AB The invention provides a method of treatment of diabetes, particularly type II diabetes, or a diabetes related condition, comprising night time dosing of an inhibitor of glycogen phosphorylase, optionally in combination another antidiabetic therapy. Preparation of e.g. 5-chloropyrrolo[2,3-c]pyridine-2-carboxylic acid [1-(S)-(4-fluorobenzyl)-2-(4-hydroxypiperidin-1-yl)-2-oxoethyl]amide hydrochloride is described.
IT 83480-29-9, Voglibose
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(glycogen phosphorylase inhibitors for treatment of diabetes and diabetes-related conditions, and use with other agents)
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2006:367143 CAPLUS
DN 144:412493
TI Rhodanine derivatives as PPAR receptor modulators and their preparation, pharmaceutical compositions and use for treatment and prophylaxis of various diseases
IN Sarshar, Sepehr; Marappan, Subrumanian
PA Auspex Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 106 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2006041921	A2	20060420	WO 2005-US35832	20051004

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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRAI US 2004-616574P P 20041005
OS MARPAT 144:412493
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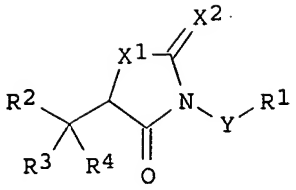

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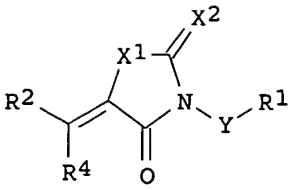
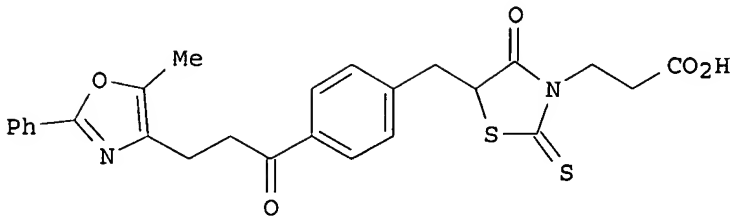


II



III

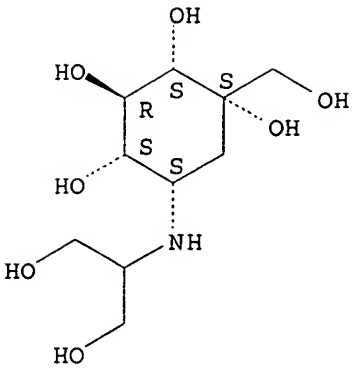
AB Processes for the preparation of compds. of formulas I and II are described. These compds. can be used as PPAR modulators and for the treatment and/or management of cancer, inflammation, cellular differentiation and proliferation, wound healing, metabolism of lipids and carbohydrates, obesity, diabetes, and energy homeostasis. Compds. of formula I and II wherein X1 and X2 are independently O, S, or NH; Y is (un)substituted C1-10 alkyl; R1 is (un)substituted C5-11 oxocycloalkenyl, (R9CO)(R10CO)CH, or (un)substituted dioxodioxanyl; R9 and R10 are independently OH, alkoxyl, aryloxy, NH2, alkylamino, arylamino, N-aryl-N-alkylamino, -NHNH2, alkylhydrazino, arylhydrazino, N-aryl-N-alkylamino, NHOH and derivs., alkyl, or aryl; R2 and R3 are independently H, halo, or alkyl; R4 is substituted aryl and heteroaryl; and their pharmaceutically acceptable salts, and prodrugs thereof are claimed. Example compound III was prepared by addition of methyllithium to 4-(diethoxymethyl)benzaldehyde to give the corresponding alc., which was oxidized to give 4-(diethoxymethyl)acetophenone, which underwent acylation with di-Et carbonate; the resulting 2-[4-(diethoxymethyl)benzoyl]acetate underwent alkylation with 4-chloromethyl-5-methyl-2-phenyloxazole followed by decarboxylation to give 4-[3-(5-methyl-2-phenyl-4-oxazolyl)propionyl]benzaldehyde, which underwent condensation with rhodanine-N-propionic acid to give 4-[3-(5-methyl-2-phenyl-4-oxazolyl)propionyl]benzylidene-3-(β-carboxyethyl)rhodanine, which underwent hydrogenation to give example compound III. The invention compds. were evaluated for their PPAR-γ modulating activity. From the assay, it was determined example compound III exhibited an EC50 0.127 μM.

IT 83480-29-9, Voglibose
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of rhodanine derivs. as PPAR receptors modulators useful in treatment and prophylaxis of diseases)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 4 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2006:295558 CAPLUS
DN 144:343604
TI Methods and compositions for treating glucose-associated conditions, metabolic syndrome, dyslipidemias and other conditions
IN Aziz, Nazneen; Jesson, Michael I.; McLean, Paul, A.; Miller, Glenn T.; Jones, Barry
PA Point Therapeutics, Inc., USA
SO PCT Int. Appl., 148 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006034435	A2	20060330	WO 2005-US34112	20050921
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	US 2006094693	A1	20060504	US 2005-233532	20050921
PRAI	US 2004-612069P	P	20040921		
	US 2004-622466P	P	20041027		
	US 2005-700871P	P	20050719		
	US 2005-704157P	P	20050729		

OS MARPAT 144:343604
AB The invention relates, in part, to of glutamic acid boroproline (Glu-boroPro) containing compds. and methods of use thereof in the prevention or management of conditions that are associated with impaired glucose tolerance such as diabetes. The invention also relates to compns. of Glu-boroPro containing compds. and methods of use thereof in the prevention or management of conditions such as metabolic syndrome, dyslipidemias, inflammation, cardiovascular disorders such as hypertension and atherosclerosis, and to reduce body weight or prevent weight gain. The compds. of the invention are also useful in lowering levels of triglycerides, free fatty acids, C-reactive protein (CRP), HbA1C, total glycosylated Hb (TGHb), in increasing insulin sensitivity index and in stimulating insulin release. The method may further comprise administering a second agent such as an antidiabetic agent. The inhibition of the serine protease DPP-IV by the compds. in vitro and vivo

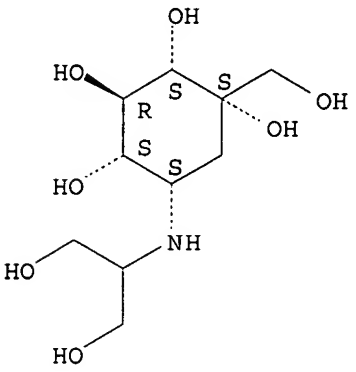
was determined

IT 83480-29-9, Voglibose
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(treatment of glucose-associated conditions and dyslipidemias and other conditions using glutamic acid boroproline containing compds. and other agents in relation to inhibition of serine protease DPP-IV)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 5 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2006:283034 CAPLUS

DN 144:445125

TI Control of plasma glucose with alpha-glucosidase inhibitor attenuates oxidative stress and slows the progression of heart failure in mice

AU Liao, Yulin; Takashima, Seiji; Zhao, Hui; Asano, Yoshihiro; Shintani, Yasunori; Minamino, Tetsuo; Kim, Jiyoong; Fujita, Masashi; Hori, Masatsugu; Kitakaze, Masafumi

CS Department of Cardiovascular Medicine, Osaka University Graduate School of Medicine, Suita, Osaka, 565-0871, Japan

SO Cardiovascular Research (2006), 70(1), 107-116
CODEN: CVREAU; ISSN: 0008-6363

PB Elsevier B.V.

DT Journal

LA English

AB It was suggested that reduction in glucose levels contributes to the prolongation of life span of rodents in conjunction with restricted food intake, and hyperglycemia was confirmed as a risk factor for cardiovascular disease (CVD), raising the possibility that better glycemic control could slow the progression of CVD. This study was designed to determine whether impaired glucose tolerance develops during the progression of cardiac hypertrophy and heart failure, and whether tight glycemic control could reduce the severity of heart failure. In male C57BL/6 mice, transverse aortic constriction (TAC) was employed to create cardiac hypertrophy and heart failure. The involvement of NADPH in TAC mice and cardiac myocytes in the neonatal rat was investigated. The random-fed blood plasma glucose concentration was higher in TAC mice, and it was reduced to about 100 mg/dL by voglibose (an alpha-glycosidase inhibitor). Four weeks after TAC, both the heart weight/body weight ratio and the lung weight/body weight ratio were lower in the voglibose group than in the TAC group. Echocardiog. and invasive hemodynamic examination showed improvement of left ventricular function in voglibose-treated mice. Voglibose treatment decreased the myocardial expression of an NADPH oxidase subunit (p47phox). Glucose dose-dependently increased

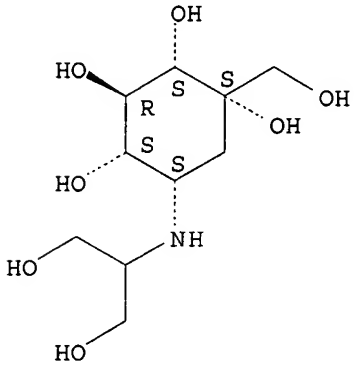
both neonatal rat myocyte protein synthesis and the expression of p47phox protein, while apocynin (an NADPH oxidase inhibitor) blocked the enhancement of protein synthesis by high glucose. Improvement of glycemic control through voglibose therapy inhibited cardiac remodeling by decreasing myocardial oxidative stress in mice with cardiac pressure overload.

IT 83480-29-9, Voglibose
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(glycemic control with voglibose attenuates oxidative stress and slows progression of heart failure)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:1075757 CAPLUS

DN 143:367531

TI Processes for the purification of voglibose and the preparation and purification of its intermediates

IN Babu, Jayachandra Suresh; Chavan, Gajanan Jijaba; Khanduri, Chandra Has; Kumar, Yatendra; Ray, Purna Chandra

PA Ranbaxy Laboratories Limited, India

SO PCT Int. Appl., 19 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005092834	A1	20051006	WO 2005-IB777	20050324
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRAI	IN 2004-DE616	A	20040329		

OS MARPAT 143:367531

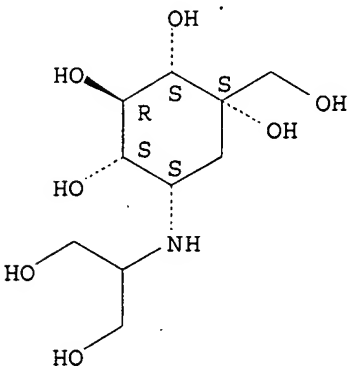
AB Voglibose is purified by adding it to a solvent and contacting the solution with activated carbon, filtering, and crystallizing the filtrate. Also described are processes for the preparation and purification of substituted or unsubstituted 5-oxo-1,2,3,4-cyclohexanetetrol and substituted 5-amino-1,2,3,4-cyclohexanetetrol, which compds. are useful intermediates in the preparation of voglibose.

IT 83480-29-9P, Voglibose
RL: PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)
(processes for the purification of voglibose and the preparation and purification of its intermediates)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:1058467 CAPLUS

DN 144:163949

TI Voglibose potentiates the hepatotoxicity of carbon tetrachloride and acetaminophen by inducing CYP2E1 in rats

AU Qin, Li-Qiang; Wang, Pei-Yu; Wang, Yuan; Kaneko, Takashi; Hoshi, Kazuhiko; Sato, Akio

CS Department of Obstetrics and Gynecology, School of Medicine, University of Yamanashi, Tamaho Town, Yamanashi, 409-3898, Japan

SO Hepatology Research (2005), 33(1), 50-56
CODEN: HPRSFM; ISSN: 1386-6346

PB Elsevier B.V.

DT Journal

LA English

AB Background: Voglibose is an α-glucosidase inhibitor used to decrease postprandial hyperglycemia in diabetic patients. Although clin. concern has not yet been raised, hepatic dysfunction has been reported in a few patients taking this drug. Method: In the present study, we studied the effects of voglibose on the hepatotoxicity of carbon tetrachloride (CCl4) and acetaminophen (APAP) in rats, since both of these agents exert their effects through isoforms of cytochrome P 450. Male Sprague-Dawley rats were given a daily ration (20 g) of powdered chow diet containing 0, 2.5, 5.0 or 10.0 mg/100 g of voglibose. Three weeks later, the rats were challenged with either 0.50 g/kg CCl4 orally or 0.75 g/kg APAP i.p. for biochem. examns. or killed for an in vivo metabolism study. Results: Voglibose at these three exptl. doses potentiated CCl4 and APAP hepatotoxicity, as evidenced by significantly increased levels of both plasma aspartate transaminase (AST) and alanine transaminae (ALT). The glutathione (GSH)

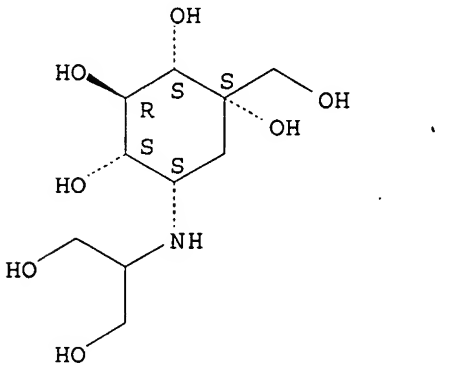
content was decreased while malondialdehyde (MDA) increased in the liver after CCl4 or APAP administration. Hepatic cytochrome P 450 2E1 (CYP2E1) concentration was increased at doses of 5.0 and 10.0 mg/100 g of voglibose and its activity increased in the three voglibose dosage groups, while hepatic cytochrome P 450 3A (CYP3A) and cytochrome P 450 1A2 (CYP1A2) were only slightly changed at any dose. Conclusion: Our study demonstrated that voglibose can potentiate CCl4 and APAP hepatotoxicity in rats by inducing hepatic CYP2E1.

IT 83480-29-9, Voglibose
RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(voglibose potentiated carbon tetrachloride and acetaminophen induced hepatotoxicity by inducing hepatic cytochrome P 450 2E1 in rat)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 8 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:511752 CAPLUS

DN 143:298852

TI Inhibitory effect of pine extract on α-glucosidase activity and postprandial hyperglycemia

AU Kim, Yong-Mu; Jeong, Youn-Kab; Wang, Myeong-Hyeon; Lee, Wi-Young; Rhee, Hae-Ik

CS Division of Biotechnology, Kangwon National University, Chunchon, S. Korea

SO Nutrition (New York, NY, United States) (2005), 21(6), 756-761
CODEN: NUTRER; ISSN: 0899-9007

PB Elsevier Inc.

DT Journal

LA English

AB Objective: This study investigated the inhibitory effect of pine bark extract (PBE) and needle extract on carbohydrate-hydrolyzing enzymes and the hypoglycemic effect in diabetic mice (Lep ob [ob/ob]). Methods: Pine bark and needle were dried and then placed in ethanol, and the exts. were assayed for the measurement of inhibition mode of PBE against α-amylase (EC 3.2.1.1) and α-glucosidase (EC 3.2.1.20). We also investigated the effect of long-term treatment with exts. on levels of postprandial blood glucose, body weight, food efficiency ratio, and gene expression of glucose transporter-4 in quadriceps muscle in diabetic mice (Lep ob [ob/ob]). Results: The PBE showed competitive inhibition against salivary α-amylase and the combination of non-competitive and uncompetitive inhibition against yeast α-glucosidase. In animal expts., PBE effectively suppressed the increase of postprandial blood glucose level by delaying absorption of diet, and body wts. of the group

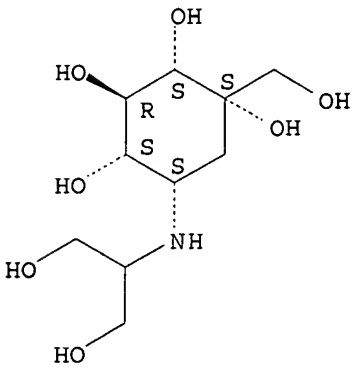
that received PBE were significantly lower than that in the group administered 0.5% carboxylmethyl cellulose (control) 21 d after administration. Conclusions: PBE can be used to suppress postprandial hyperglycemia of diabetic patients. It also can be applied for control of obesity by decreasing the food efficiency ratio, especially carbohydrates.

IT 83480-29-9, Voglibose
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhibitory activity of pine bark extract on α-glucosidase from porcine small intestine was lower than that of acarbose or voglibose in diabetic mouse)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 9 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:472107 CAPLUS

DN 143:26811

TI Process for the preparation of 1,2,3,4-cyclohexanetetrol derivatives as intermediates for preparation of voglibose

IN Khanduri, Chandra Has; Babu, Jayachandra Suresh; Ray, Purna Chandra; Shah, Jigar Bhaskarbhai; Kumar, Yatendra

PA Ranbaxy Laboratories Limited, India

SO PCT Int. Appl., 33 pp.
CODEN: PIXXD2

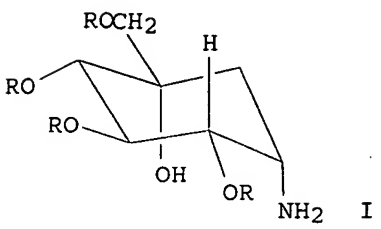
DT Patent

LA English

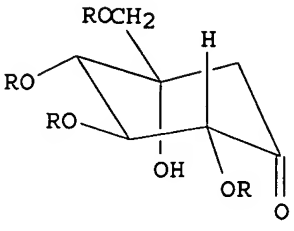
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005049547	A1	20050602	WO 2004-IB3782	20041118
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRAI	IN 2003-DE1448	A	20031121		
	IN 2004-DE1507	A	20040816		

OS CASREACT 143:26811; MARPAT 143:26811
GI



I



II

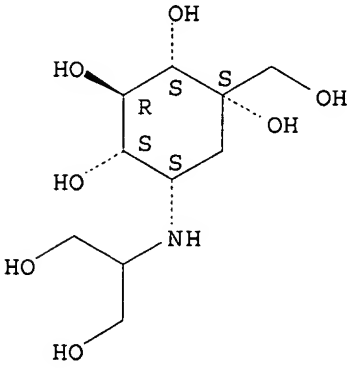
AB The aminocyclohexanetetrol derivs. I (R = H, protective group), intermediates for voglibose, were prepared by reaction of the 2,3,4,5-tetrahydroxycyclohexanone derivs. II with ammonium acetate, ammonium formate or a mixture thereof and one or more reducing agents. Thus, II (R = Bn), prepd from the 6,6-dichloro derivative, underwent reductive amination with ammonium acetate and sodium cyanoborohydride to give I (R = Bn), which reacted with with 1,3-dihydroxyacetone followed by hydrogenolysis to give voglibose.

IT 83480-29-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(process for preparation of 1,2,3,4-cyclohexanetetrol derivs. as intermediates for voglibose)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 10 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2005:300390 CAPLUS
DN 142:374066
TI Salification and neutralization process for the preparation of pure voglibose
IN Khanduri, Chandra Has; Babu, Jayachandra Suresh; Ray, Purna Chandra; Shah, Jigar Bhaskarbhai; Kumar, Yatendra
PA Ranbaxy Laboratories Limited, India
SO PCT Int. Appl., 25 pp.
CODEN: PIXXD2
DT Patent

LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005030698	A1	20050407	WO 2004-IB3120	20040924

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI IN 2003-DE1210 A 20030926

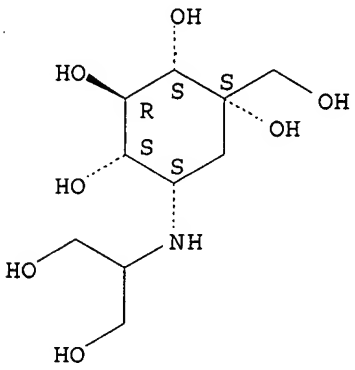
AB Pure voglibose, useful as a pharmaceutical, is prepared by preparing the crystalline hydrochloride salt of voglibose from voglibose and HCl and then neutralizing that salt with a base.

IT 849419-34-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(in a salification and neutralization process for the preparation of pure voglibose)

RN 849419-34-7 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)-, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



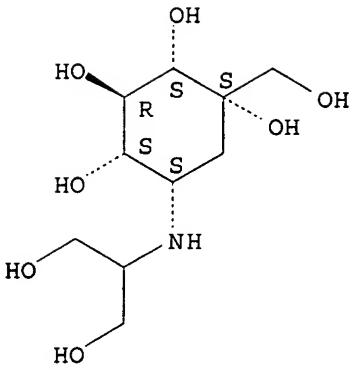
● HCl

IT 83480-29-9P, Voglibose
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PUR (Purification or recovery); PYP (Physical process); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses)
(salification and neutralization process for the preparation of pure voglibose)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 11 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2005:216708 CAPLUS
DN 142:285211
TI Combination of cicletanine and an oral antidiabetic and/or blood lipid-lowering agent for treating diabetes and metabolic syndrome
IN Fong, Benson M.; Cornett, Glenn V.
PA Cotherix, Inc., USA
SO PCT Int. Appl., 62 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 4

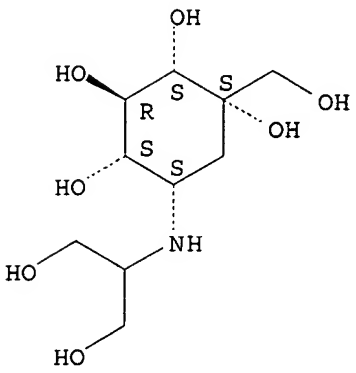
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005021039	A1	20050310	WO 2004-US28087	20040827
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2537180	AA	20050310	CA 2004-2537180	20040827
PRAI	US 2003-498916P	P	20030829		
	WO 2004-US28087	W	20040827		

AB Preferred embodiments of the present invention are related to novel therapeutic drug combinations and methods for treating and/or preventing complications in patients with diabetes and/or metabolic syndrome. More particularly, aspects of the present invention are related to using a combination of cicletanine and an oral antidiabetic agent for treating and/or preventing complications (including microalbuminuria, nephropathies, retinopathies and other complications) in patients with diabetes or metabolic syndrome.

IT 83480-29-9, Voglibose
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(combination of cicletanine and an oral antidiabetic and/or blood lipid-lowering agent for treating diabetes and metabolic syndrome)

RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

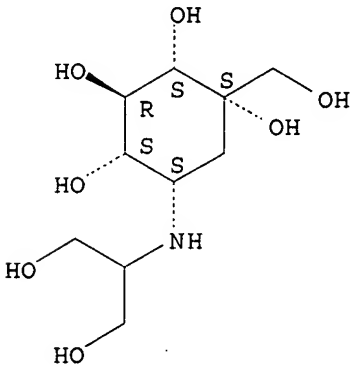
L5 ANSWER 12 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2005:216666 CAPLUS
DN 142:291400
TI Glutaminyl thiazolidine or glutaminyl pyrrolidine in combination with other hypoglycemic agents for glycemic control
IN Demuth, Hans-Ulrich; Glund, Konrad; Hoffmann, Matthias
PA Prosidion Ltd., UK
SO PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005020983	A2	20050310	WO 2004-IB3082	20040902
	WO 2005020983	A3	20050728		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2004267955	A1	20050310	AU 2004-267955	20040902
	CA 2536432	AA	20050310	CA 2004-2536432	20040902
	EP 1663200	A2	20060607	EP 2004-769446	20040902
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
PRAI	US 2003-499535P	P	20030902		
	WO 2004-IB3082	W	20040902		

AB The invention relates to method of treatment, in particular to a method for the treatment of diabetes mellitus, especially non-insulin dependent diabetes mellitus (NIDDM) or Type 2 diabetes and conditions associated with diabetes mellitus the pre-diabetic state and/or obesity and to compns. for use in such method. The invention comprises the administration of glutaminyl thiazolidine or glutaminyl pyrrolidine in combination with other antidiabetic agents. Glutaminyl pyrrolidine free base and hydrochloride and glutaminyl thiazolidine hydrochloride were synthesized.

IT 83480-29-9, Voglibose
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(glutaminyl thiazolidine or glutaminyl pyrrolidine in combination with other hypoglycemic agents for glycemic control)
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

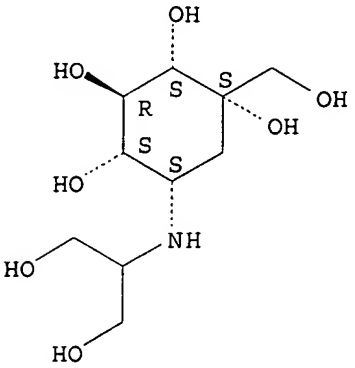
Absolute stereochemistry.



L5 ANSWER 13 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2005:130505 CAPLUS
DN 142:475688
TI α-Glucosidase inhibitor reduces the progression of carotid intima-media thickness
AU Yamasaki, Yoshimitsu; Katakami, Naoto; Hayaishi-Okano, Rieko; Matsuhisa, Munehide; Kajimoto, Yoshitaka; Kosugi, Keisuke; Hatano, Mitue; Hori, Masatsugu
CS Department of Internal Medicine and Therapeutics, Osaka University Graduate School of Medicine, Suita City, Osaka, 565-0871, Japan
SO Diabetes Research and Clinical Practice (2005), 67(3), 204-210
CODEN: DRCPE9; ISSN: 0168-8227
PB Elsevier B.V.
DT Journal
LA English
AB Objective: An open randomized prospective study was performed to elucidate the effect of an α-glucosidase inhibitor, voglibose, on the progression of atherosclerosis in subjects with type 2 diabetes. Research design and methods: Voglibose at a dose of 0.4-0.6 mg/day was added on 51 subjects out of 101 type 2 diabetic patients being treated with diet, sulfonylurea (SU) or insulin injections, and the average (AveIMT) and maximum intima-media thickness (MaxIMT) of their carotid arteries were examined for 3 years. Results: Irresp. of the differences in treatments, addition of voglibose reduced the progression of AveIMT and MaxIMT to -0.024 ± 0.047 (±S.D.) and -0.021 ± 0.144 mm/yr, resp. Without voglibose, diabetic patients showed significant ($P < 0.0001$) progression of AveIMT and MaxIMT (0.056 ± 0.046 and 0.098 ± 0.122 mm/yr, resp.). The administration of voglibose resulted in a significant reduction of Hb A1c (HbA1c), total cholesterol and triglyceride concns., as well as an increase in HDL cholesterol concentration Multivariate regression anal. showed that administration of voglibose independently reduced the progression of AveIMT by 0.069 mm/yr ($P < 0.0001$). Conclusions: These results suggest that voglibose reduces the progression of IMT and may be a candidate for an anti-atherosclerotic drug for type 2 diabetic patients.
IT 83480-29-9, Voglibose
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)
(long-term administration of voglibose significantly reduced progression of average and maximum intima-media thickness of carotid artery in
patient with type 2 diabetes)
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 14 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2005:121066 CAPLUS
DN 142:212370
TI PDE10a inhibitors for treating diabetes and related disorders
IN Sweet, Laurel
PA Bayer Pharmaceuticals Corporation, USA
SO PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005012485	A2	20050210	WO 2004-US24073	20040727
	WO 2005012485	A3	20050414		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2534432	AA	20050210	CA 2004-2534432	20040727
	EP 1651251	A2	20060503	EP 2004-779234	20040727
	R: DE, ES, FR, GB, IT				
PRAI	US 2003-491730P	P	20030731		
	WO 2004-US24073	W	20040727		

AB The methods of the invention relate to the treatment of diabetes, including type 2 diabetes, and related disorders by administration of a PDE10A inhibitor. Such PDE10A inhibitors may be administered in conjunction with alpha-glucosidase inhibitors, insulin

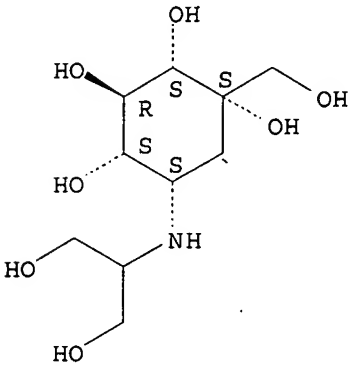
sensitizers, insulin secretagogues, hepatic glucose output lowering compds., β-3 agonist, or insulin. Such PDE10A inhibitors may also be administered in conjunction with body weight reducing agents. Further methods of the invention relate to stimulating insulin release from pancreatic cells, for example, in response to an elevation in blood glucose concentration, by administration of a PDE10A inhibitor.

IT 83480-29-9, Voglibose
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(PDE10a inhibitors for treating diabetes and related disorders)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 15 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:120729 CAPLUS

DN 142:219276

TI Preparation of 5-substituted 2H-pyrazole-3-carboxylic acid derivatives as agonists for the RUP25 nicotinic acid receptor for the treatment of dyslipidemia and related diseases

IN Semple, Graeme; Gharbaoui, Tawfik; Shin, Young-Jun; Decaire, Marc; Averbuj, Claudia; Skinner, Philip J.

PA Arena Pharmaceuticals, Inc., USA

SO PCT Int. Appl., 130 pp.
CODEN: PIXXD2

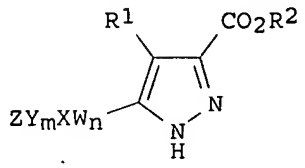
DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005011677	A1	20050210	WO 2004-US18389	20040610
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2004260636	A1	20050210	AU 2004-260636	20040610
	CA 2528834	AA	20050210	CA 2004-2528834	20040610
	EP 1633351	A1	20060315	EP 2004-776418	20040610
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				

PRAI US 2003-478664P P 20030613
WO 2004-US18389 W 20040610
OS MARPAT 142:219276
GI



I

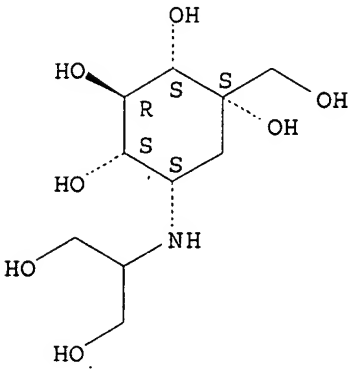
AB Title compds. [I; W, Y = (substituted) alkylene, alkenylene, alkynylene; X = NR3CO, NR3SO2, NR3, CO, CH(OH), C(NH), O, S, SO, SO2, etc.; R3, R4 = H, (substituted) alkyl, Ph, heteroaryl; Z = H, halo, (substituted) Ph, heteroaryl; R1 = H, OH, halo, alkyl, haloalkyl; R2 = H, alkyl; m, n = 0, 1; with provisos], were prepared Thus, 5-methylthiomethyl-2H-pyrazole-3-carboxylic acid (preparation outlined) showed hRUP25 agonist activity with EC50 = 4.3 μM.

IT 83480-29-9, Voglibose
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(coadministration; preparation of pyrazolecarboxylates as agonists for the RUP25 nicotinic acid receptor for the treatment of dyslipidemia and related diseases)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

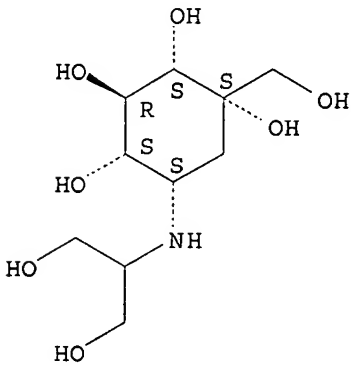


RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 16 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2005:111522 CAPLUS
DN 143:53258
TI α-glucosidase inhibitors for patients with type 2 diabetes: Results from a Cochrane systematic review and meta-analysis
AU van de Laar, Floris A.; Lucassen, Peter L.; Akkermans, Reinier P.; van de Lisdonk, Eloy H.; Rutten, Guy E.; van Weel, Chris
CS Department of General Practice, Radboud University Nijmegen Medical Centre, Nijmegen, Neth.
SO Diabetes Care (2005), 28(1), 154-163
CODEN: DICAD2; ISSN: 0149-5992

PB American Diabetes Association, Inc.
DT Journal
LA English
AB OBJECTIVE: To review the effects of monotherapy with α-glucosidase inhibitors (AGIs) for patients with type 2 diabetes, with respect to mortality, morbidity, glycemic control, insulin levels, plasma lipids, body weight, and side effects. RESEARCH DESIGN AND METHODS: We systematically searched the Cochrane Central register of Controlled Trials, MEDLINE, EMBASE, Current Contents, LILACS, databases of ongoing trials, and reference lists, and we contacted experts and manufacturers. Inclusion criteria were randomized controlled trials of at least 12 wk' duration, AGI monotherapy compared with any intervention, and one of the following outcome measures: mortality, morbidity, GHb, blood glucose, lipids, insulin levels, body weight, or side effects. Two independent reviewers assessed all abstrs., extracted all data, and assessed quality. We contacted all authors for data clarification. Continuous data were expressed as weighted mean differences and analyzed with a random-effects model. Possible influences of study characteristics and quality were assessed in sensitivity and meta-regression analyses. RESULTS: Forty-one studies were included in the review (30 acarbose, 7 miglitol, 1 voglibose, and 3 combined), and heterogeneity was limited. We found no evidence for an effect on mortality of morbidity. Compared with placebo, AGIs had a beneficial effect on GHb (acarbose -0.77%; miglitol -0.68%), fasting and postload blood glucose and postload insulin. With acarbose dosages higher than 50 mg t.i.d., the effect on GHb was the same, but the occurrence of side effects increased. Acarbose decreased the BMI by 0.17 kg/m2 (95% CI 0.08-0.26). None of the AGIs had an effect on plasma lipids. Compared with sulfonylurea, AGIs seemed inferior with respect to glycemic control, but they reduced fasting and postload insulin levels. For comparisons with other agents, little data were available. CONCLUSIONS: We found no evidence for an effect on mortality or morbidity. AGIs have clear beneficial effects on glycemic control and postload insulin levels but riot on plasma lipids. There is no need for dosages higher than 50 mg acarbose t.i.d.
IT 83480-29-9, Voglibose
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(monotherapy with α-glucosidase inhibitor voglibose had no effect on mortality, morbidity, plasma lipid level but had beneficial effect on glycemic control, postload insulin level, minor effect on body weight in type 2 diabetes patient)
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

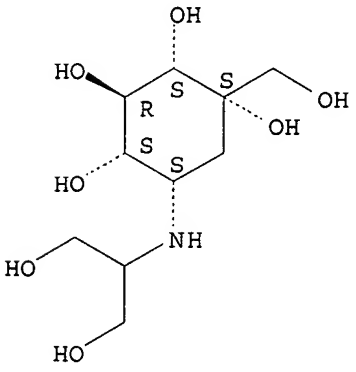
Absolute stereochemistry.



RE.CNT 76 THERE ARE 76 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 17 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2005:93259 CAPLUS
DN 143:235655
TI Determination of voglibose in pharmaceutical preparations by gas chromatography
AU Lee, Jae-Yoon; Ahn, Moon-Kyu
CS Department of Pharmacy, Kyungsung University, Pusan, 608-736, S. Korea
SO Yakhak Hoechi (2003), 47(6), 352-355
CODEN: YAHOA3; ISSN: 0377-9556
PB Pharmaceutical Society of Korea
DT Journal
LA Korean
AB Voglibose is a new antidiabetic agent currently being developed by the research and development division of Takeda chemical industries Ltd. in Japan. Basic research for the determination of voglibose in pharmaceutical preparation by gas chromatog. This method utilizes voglibose to give its acyl compound with acetyl anhydride in pyridine solution The calibration curve for voglibose was linear over the concentration range of 0.08-0.32 μg/μl with correlation coefficient of 0.996. The detection limit for voglibose was 0.016 μg/μl and the result of recovery test was 101.6% with relative standard deviation of 2.0% by standard addition method.
IT 83480-29-9, Voglibose
RL: ANT (Analyte); ANST (Analytical study)
(determination of voglibose in pharmaceutical prepns. by gas chromatog.)
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 18 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2005:14212 CAPLUS
DN 142:107414
TI Compositions comprising balaglitazone and further antidiabetic compounds
IN Wassermann, Karsten; Wulff, Erik Max
PA Novo Nordisk A/S, Den.
SO PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005000299	A1	20050106	WO 2004-DK448	20040624

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2004250994	A1	20050106	AU 2004-250994	20040624
CA 2530228	AA	20050106	CA 2004-2530228	20040624
EP 1638554	A1	20060329	EP 2004-738945	20040624

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK

PRAI DK 2003-973	A	20030627	
US 2003-483196P	P	20030627	
WO 2004-DK448	W	20040624	

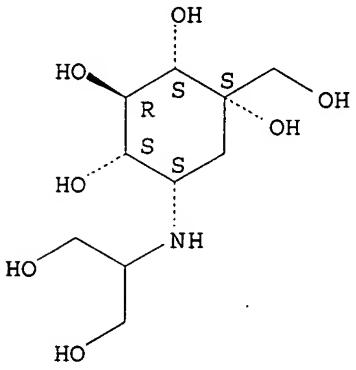
AB Methods for the treatment of type 2 diabetes and related conditions comprising the administration of balaglitazone in combination with one or more other antidiabetic compound is provided together with combinations useful in said treatment.

IT 83480-29-9, Voglibose
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compns. comprising balaglitazone and further antidiabetic compds.)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideox-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 19 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:14148 CAPLUS

DN 142:107413

TI Combination therapy for the treatment of dyslipidemia

IN Erondu, Ngozi E.; Fong, Tung M.; MacNeil, Douglas J.; Van Der Ploeg, Leonardus H. T.

PA Merck & Co., Inc., USA

SO PCT Int. Appl., 106 pp.
CODEN: PIXXD2

DT Patent

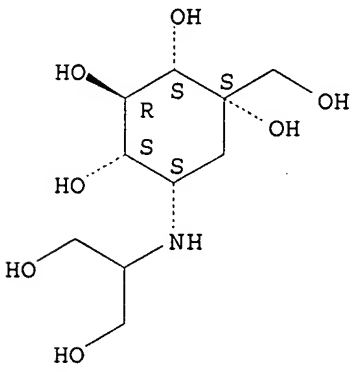
LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI WO 2005000217 A2 20050106 WO 2004-US17120 20040602
WO 2005000217 A3 20050407
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
EP 1635813 A2 20060322 EP 2004-753858 20040602
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
US 2006148721 A1 20060706 US 2005-555194 20051101
PRAI US 2003-476387P P 20030606
WO 2004-US17120 W 20040602
OS MARPAT 142:107413
AB The invention relates to compns. comprising an anti-obesity agent and an anti-dyslipidemic agent useful for the treatment of dyslipidemia, dyslipidemia associated with obesity and dyslipidemia-related disorders. The invention further relates to methods of treating or preventing obesity, and obesity-related disorders, in a subject in need thereof by administering a composition of the present invention. The invention further provides pharmaceutical compns., medicaments, and kits useful in carrying out these methods.
IT 83480-29-9, Voglibose
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combination therapy for treatment of dyslipidemia)
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 . ANSWER 20 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:1154718 CAPLUS
DN 142:93672
TI Preparation of fused pyrrole derivatives as HLGPa inhibitors for the treatment of diabetes
IN Nakamura, Takeshi; Takagi, Masaki; Kiguchi, Toshihiro; Ikenogami, Taku; Ueda, Nobuhisa
PA Japan Tobacco Inc., Japan
SO PCT Int. Appl., 120 pp.
CODEN: PIXXD2

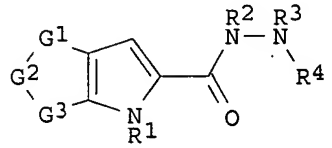
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004113345	A1	20041229	WO 2004-JP8917	20040618

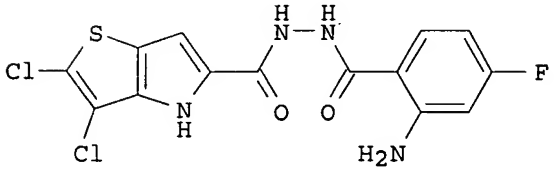
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI JP 2003-177213 A 20030620
OS MARPAT 142:93672
GI



I



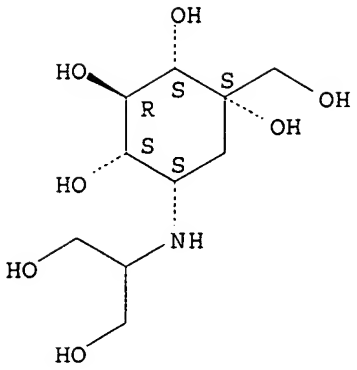
II

AB Title compds. represented by the formula I [wherein R1 = H or acyl; R2 = H or alkyl; R3 = H or alkyl; R4 = C(:X)AB; X = O, S, NH; A = (un)substituted amino, alkylene(amino), carbonyl or a single bond; B = (un)substituted Ph, pyridinyl, pyrimidinyl, cyclobutyl, etc.; G1 = CO, CS, CH2, G2 = O, CH2, (un)substituted amino; G3 = (un)substituted CH or amino; and their prodrugs, pharmaceutically acceptable salts thereof] were prepared as inhibitors of human liver glycogen phosphorylase A (HLGPa). For example, II was given in a multi-step synthesis starting from 2,3-dichlorothiophene. Most of I showed inhibition of HLGPa with IC50 values of less than 100 nM. Thus, I and their pharmaceutical compns. are useful as HLGPa inhibitors for the treatment of diabetes.

IT 83480-29-9, Voglibose
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combination therapy agent; preparation of fused pyrrole derivs. as HLGPa inhibitors for treatment of diabetes)

RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

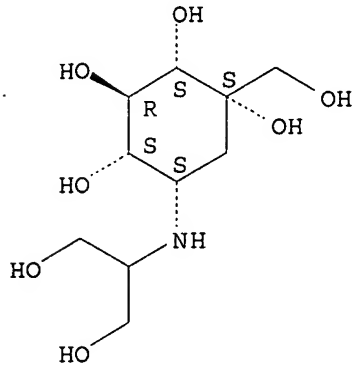
L5 ANSWER 21 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:1124581 CAPLUS
DN 142:69181
TI Combination therapy for the treatment of hypertension
IN Fong, Tung M.; Erondu, Ngozi E.; Macneil, Douglas J.; Mcintyre, James H.; Van Der Ploeg, Leonardus H. T.
PA Merck & Co., Inc., USA
SO PCT Int. Appl., 99 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004110368	A2	20041223	WO 2004-US17090	20040602
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1635773	A2	20060322	EP 2004-753832	20040602
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
	US 2006160834	A1	20060720	US 2005-559111	20051202
PRAI	US 2003-476390P	P	20030606		
	WO 2004-US17090	W	20040602		

OS MARPAT 142:69181
AB The present invention relates to compns. comprising an anti-obesity agent and an anti-hypertensive agent useful for the treatment of hypertension, hypertension associated with obesity, and hypertension-related disorders. The present invention further relates to methods of treating or preventing obesity, and obesity-related disorders, in a subject in need thereof by administering a composition of the present invention. The present invention further provides for pharmaceutical compns., medicaments, and kits useful in carrying out these methods.
IT 83480-29-9, Voglibose
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combination therapy of hypertension and hypertension-related disorders using antiobesity agent and antihypertensive agent and other agents and

antihypertensive agent)
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



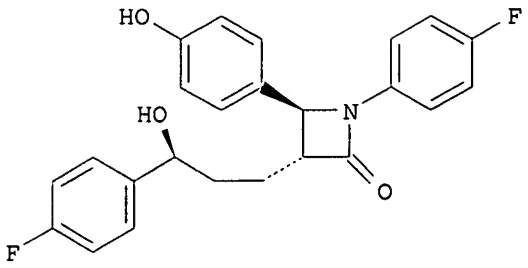
L5 ANSWER 22 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:905613 CAPLUS
DN 141:360699
TI Methods and therapeutic combinations for the treatment of diabetes using sterol absorption inhibitors
IN Davis, Harry R.; Kosoglou, Teddy; Picard, Gilles J.; Ress, Rudyard J.; Strony, John T.; Veltri, Enrico P.
PA Schering Corporation, USA
SO U.S. Pat. Appl. Publ., 42 pp., Cont.-in-part of U.S. Ser. No. 166,942.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 12

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004214811	A1	20041028	US 2002-247099	20020919
	US 7071181	B2	20060704		
	US 2002151536	A1	20021017	US 2002-57323	20020125
	EP 1413331	A2	20040428	EP 2004-161	20020125
	EP 1413331	A3	20040630		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	EP 1541175	A2	20050615	EP 2005-3029	20020125
	EP 1541175	A3	20060412		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	US 2002192203	A1	20021219	US 2002-136968	20020501
	US 7030106	B2	20060418		
	US 2003105028	A1	20030605	US 2002-166942	20020611
	US 6982251	B2	20060103		
	ZA 2003005692	A	20041025	ZA 2003-5692	20030723
	ZA 2003005694	A	20041025	ZA 2003-5694	20030723
	ZA 2003005693	A	20050209	ZA 2003-5693	20030723
	US 2005153952	A1	20050714	US 2004-998400	20041129
PRAI	US 2001-264396P	P	20010126		
	US 2001-323839P	P	20010921		
	US 2001-323841P	P	20010921		
	US 2002-57323	A2	20020125		
	US 2002-166942	A2	20020611		
	US 2000-256875P	P	20001220		
	US 2001-264275P	P	20010126		

	US 2001-264600P	P	20010126
	US 2001-323842P	P	20010921
	US 2001-23295	A2	20011217
	EP 2002-707500	A3	20020125
	EP 2002-714773	A3	20020125
	US 2002-136968	A3	20020501

OS MARPAT 141:360699

GI



I

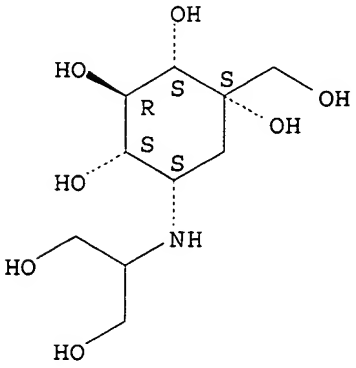
AB The invention provides methods for treating diabetes and associated conditions by administering a composition including at least one sterol or 5α-stanol absorption inhibitor or compns. or therapeutic combinations including: (a) at least one antidiabetic medication; and (b) at least one sterol or 5α-stanol absorption inhibitor. Compds. of the invention include 2-azetidinone derivs. Preparation and testing of I (ezetimibe) are described.

IT 83480-29-9, Voglibose
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sterol/5α-stanol absorption inhibitors and combinations with antidiabetic agents for treatment of diabetes)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 23 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:878167 CAPLUS

DN 141:366227

TI Preparation of imidazolidin-2-one and oxazolidin-2-one derivatives as glucagon receptor antagonists/inverse agonists

IN Kurukulasuriya, Ravi; Link, James T.; Patel, Jyoti R.; Sorensen, Bryan K.

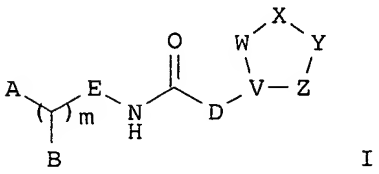
PA USA

SO U.S. Pat. Appl. Publ., 24 pp.

CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2004209928	A1	20041021	US 2003-743954	20031223
PRAI US 2002-437132P	P	20021230		

OS MARPAT 141:366227
GI



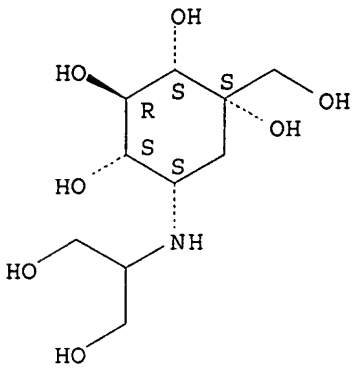
I

AB Compds. of formula (I) or pharmaceutically suitable salts, esters or prodrugs thereof, [wherein A = CO2H, tetrazole; B = H, F, OH, alkoxy, NRaRb (wherein Ra, Rb = H, alkyl, alkylcarbonyl, alkylsulfonyl alkoxyalkyl, cycloalkyl, cycloalkylcarbonyl, cycloalkylsulfonyl, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, heterocyclylcarbonyl, heterocyclesulfonyl); D = aryl, heteroaryl; E = (CH2)n; m, n = 0, 1, 2; V = C(Rc), N (wherein Rc = H, alkyl, alkoxy, alkoxyalkyl, cycloalkyl, cycloalkyloxy, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl); W = C(RdRe), (Rd)N, O, S, S(O), S(O)2; X = C(O), C(O)C(RfRg), C(RfRg)C(O), C(S), C(RfRg), C(RfRg)C(RiRj), C:N(Rj), S(O), S(O)2; Y = C(RkRm), (Rk)N, O, S, S(O), S(O)2; Z = a bond, C(RpRq), C(RpRq)C(RsRt); Rd, Re, Rf, Rg, Ri, Rj, Rk, Rm, Rp, Rq, Rs, Rt = H, alkyl, alkoxy, alkoxyalkyl, aryl, arylalkyl, aryloxy, arylalkoxy, cycloalkyl, cycloalkylalkyl, cycloalkyloxy, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, heterocyclyloxy, heterocyclylalkoxy] are prepared These compds. are novel glucagon receptor antagonists or inverse agonists and are useful for treating (1) type 2 diabetes in a mammal, (2) symptoms related to type 1 or type 2 diabetes in a mammal wherein said symptoms are selected from the group consisting of hyperglycemia, hyperinsulinemia, inadequate glucose clearance, obesity, hyperlipidemia, lipid metabolism disorders and hypertension, and (3) diabetes or syndrome X in a mammal. Thus, 3-[4-[1-(4-tert-butylcyclohexylamino)-2-(tert-butyldimethylsilanyloxy)ethyl]benzoylamino]propionic acid Et ester underwent addition reaction with 4-(trifluoromethoxy)phenyl isocyanate in THF at ambient temperature for 12 h to give 3-[4-[1-[N-(4-tert-butylcyclohexyl)-N'-(4-trifluoromethoxyphenyl)ureido]-2-(tert-butyldimethylsilanyloxy)ethyl]benzoylamino]propionic acid Et ester (II). Desilylation of II with Bu4NF in THF at 0° for 30 min gave 3-[4-[1-[N-(4-tert-Butylcyclohexyl)-N'-(4-trifluoromethoxyphenyl)ureido]-2-hydroxyethyl]benzoylamino]propionic acid Et ester which was cyclized by treatment with polymer supported triphenylphosphine (0.146 g, 0.44 mmol) followed by di-Et azodicarboxylate, saponification with NaOH in aqueous MeOH, and acidification with 1 N aqueous HCl to give N-[4-[3-(4-tert-butylcyclohexyl)-2-oxo-1-[4-(trifluoromethoxy)phenyl]imidazolidin-4-yl]benzoyl]-β-alanine. The compds. I were found to inhibit glucagon-stimulated cAMP prodn. at a concentration of 20 μM a range of about 50 to .apprx.100%.

IT 83480-29-9, Voglibose
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antidiabetic agent, coadministration; preparation of imidazolidin-2-one and oxazolidin-2-one derivs. as glucagon receptor antagonists/inverse agonists for treating type II diabetes or symptoms related to type 1 or 2 diabetes)

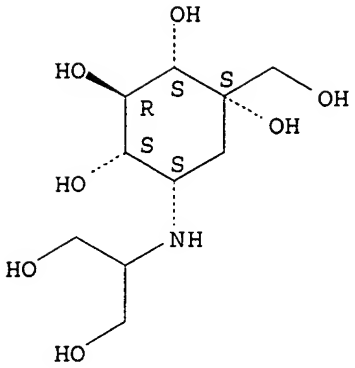
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 24 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:581402 CAPLUS
DN 141:260973
TI Determination of the structures of four new isomeric cyclitols
AU Zhang, Hong; Sun, Cui-Rong; Ishurd, Omar; Pan, Yuan-Jiang; Ding, Li-Sheng
CS Department of Chemistry, Zhejiang University, Hang Zhou, 310027, Peop. Rep. China
SO Carbohydrate Research (2004), 339(11), 2027-2030
CODEN: CRBRAT; ISSN: 0008-6215
PB Elsevier
DT Journal
LA English
AB A series of impurities, which were all of the same mol. formula, C17H33NO7, were obtained in the process of voglibose synthesis. After isolation and purification, four isomeric cyclitols were completely assigned by 2D NMR expts. One of the compds. was established by single-crystal X-ray diffraction anal. as 5,6-dideoxy-5-{[2-hydroxy-1-(hydroxymethyl)ethyl]amino}-1-C-(methoxycyclohexylmethyl)-D-epi-inositol.
IT 83480-29-9P, Voglibose
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PRP (Properties); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)
(2D NMR mol. structure determination of the impurities obtained in the synthesis of voglibose)
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

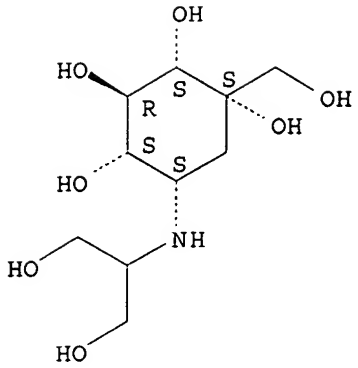
L5 ANSWER 25 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:392082 CAPLUS
DN 140:380681
TI Nutritional supplement containing alpha-glucosidase and alpha-amylase inhibitors
IN Murray, Mary A.; Roufs, James B.; Roh-Schmidt, Haeri
PA USA
SO U.S. Pat. Appl. Publ., 8 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004091554	A1	20040513	US 2002-290079	20021107
	JP 2004154126	A2	20040603	JP 2003-184272	20030627
	JP 3793764	B2	20060705		
	KR 2004041026	A	20040513	KR 2003-78232	20031106
	CN 1498659	A	20040526	CN 2003-10103807	20031106
	US 2005208161	A1	20050922	US 2005-131538	20050518
PRAI	US 2002-290079	A	20021107		

AB A nutritional supplement composition contains inhibitors of α-glucosidase and α-amylase substantially in the absence of lipase inhibitors. The composition can include touchi extract and phaseolamin as the α-glucosidase and α-amylase inhibitor, resp. A method of limiting the absorption of carbohydrates contained in a foodstuff includes administering the nutritional supplement composition prior to consumption of the carbohydrates, and a method of promoting weight loss in an individual includes administering the nutritional supplement composition to the individual over a period of days. A tablet contained microcryst. cellulose 40.71, Touchi (soybean extract) 19.93, croscarmellose sodium 2.37, phaseolamin 31.56, stearic acid 3.79, silica 0.76, and organic parsley 1.89 %.

IT 83480-29-9, Voglibose
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nutritional supplements containing inhibitors of α-glucosidase and α-amylase for weight loss)
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

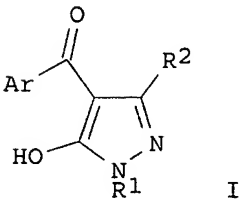
Absolute stereochemistry.



L5 ANSWER 26 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:333698 CAPLUS
DN 140:357333
TI Preparation of aroylhydroxypyrazoles for treatment of metabolic disorders
IN Semple, Graeme; Shin, Young Jun
PA Arena Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 125 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004033431	A2	20040422	WO 2003-US31509	20031002
	WO 2004033431	A3	20040729		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2003282679	A1	20040504	AU 2003-282679	20031002
PRAI	US 2002-416193P	P	20021004		
	US 2002-417120P	P	20021007		
	WO 2003-US31509	W	20031002		

OS MARPAT 140:357333
GI



I

AB Title compds. [I; R1 = alkyl, haloalkyl, cycloalkyl, alkenyl, alkynyl, benzyl, optionally substituted with ≥1 halo, OH, cyano, NO2, haloalkyl, amino, aminoalkyl, aminodialkyl, alkyl, cycloalkyl, alkoxy, phenoxy, alkenyl, alkynyl, haloalkoxy, carboxy, carboalkoxy, alkylcarboxamido, arylcarboxamido, heteroarylcarboxamido, heterocyclic

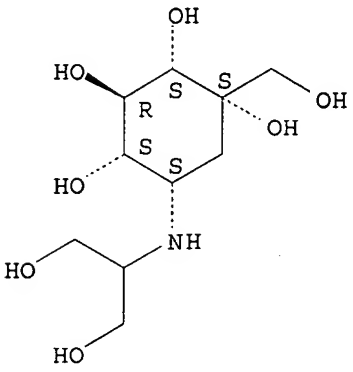
carboxamido, alkylthio, alkylsulfinyl, alkylsulfonyl, haloalkylthio, haloalkylsulfinyl, haloalklcylsulfonyl, alkylureyl, arylureyl; R2 = H, alkyl, haloalkyl, cycloalkyl, alkenyl, alkynyl, PhCH2, Ph, heteroaryl, optionally substituted with ≥1 halo, OH, cyano, nitro, haloalkyl, amino, aminoalkyl, aminodialkyl, alkyl, cycloalkyl, alkoxy, phenoxy, alkenyl, alkynyl, haloalkoxy, carboxy, carboalkoxy, alkylcarboxamido, arylcarboxamido, heteroarylcarboxamido, heterocyclic carboxamido, alkylthio, alkylsulfmyl, alkylsulfonyl, haloalkylthio, haloalkylsulfinyl, haloalkylsulfonyl, alkylureyl or arylureyl groups; Ar = (substituted) pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl], were prepared for the treatment of metabolic-related disorders, including dyslipidemia, atherosclerosis, coronary heart disease, insulin resistance, type 2 diabetes, Syndrome-X and the like (no data). Thus, nicotinyl chloride, 2-methyl-5-propyl-2,4-dihydropyrazol-3-one, and Ca(OH)2 were heated at 90° in dioxane for 2 h. to give (5-hydroxy-1-methyl-3-propyl-1H-pyrazol-4-yl)pyridin-3-ylmethanone. I may be used in combination with other active agents such α-glucosidase inhibitors, aldose reductase inhibitors, biguanides, HMG-CoA reductase inhibitors, squalene synthesis inhibitors, fibrates, LDL catabolism enhancers, angiotensin converting enzyme inhibitors, and insulin secretion enhancers.

IT 83480-29-9, Voglibose
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(coadministration; preparation of aroylhydroxypyrazoles for treatment of metabolic disorders)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 27 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:145230 CAPLUS

DN 141:218619

TI Rationale and design of a large-scale trial using nicorandil as an adjunct to percutaneous coronary intervention for ST-segment elevation acute myocardial infarction: Japan-working groups of acute myocardial infarction for the reduction of necrotic damage by a K-ATP channel opener (J-WIND-KATP)

AU Minamino, Tetsuo; Kim, Jiyoong; Asakura, Masanori; Shintani, Yasunori; Asanuma, Hiroshi; Kitakaze, Masafumi

CS J-WIND Investigators, Japan Foundation for Aging and Health for Medical Frontier Strategy Research by Health and Labor Sciences Research Grants, National Cardiovascular Center, Suita, Japan

SO Circulation Journal (2004), 68(2), 101-106
CODEN: CJIOBY; ISSN: 1346-9843

PB Japanese Circulation Society

DT Journal

LA English

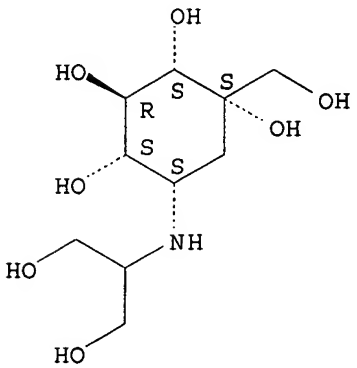
AB Background: The benefits of percutaneous coronary intervention (PCI) in acute myocardial infarction (AMI) are limited by reperfusion injury. In animal models, nicorandil, a hybrid of an ATP-sensitive K+ (KATP) channel opener and nitrates, reduces infarct size, so the Japan-Working groups of acute myocardial Infarction for the reduction of Necrotic Damage by a K-ATP channel opener (J-WIND-KATP) designed a prospective, randomized, multicenter study to evaluate whether nicorandil reduces myocardial infarct size and improves regional wall motion when used as an adjunctive therapy for AMI. Methods and Results: Twenty-six hospitals in Japan are participating in the J-WIND-KATP study. Patients with AMI who are candidates for PCI are randomly allocated to receive either i.v. nicorandil or placebo. The primary end-points are (1) estimated infarct size and (2) left ventricular function. Single nucleotide polymorphisms (SNPs) that may be associated with the function of KATP-channel and the susceptibility of AMI to the drug will be examined Furthermore, a data mining method will be used to design the optimal combined therapy for post-myocardial infarction (MI) patients. Conclusions: It is intended that J-WIND-KATP will provide important data on the effects of nicorandil as an adjunct to PCI for AMI and that the SNPs information that will open the field of tailor-made therapy. The optimal therapeutic drug combination will also be determined for post-MI patients.

IT 83480-29-9, Voglibose
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(nicorandil and cardiovascular agent for decreasing risk of cardiac events in patients with post-myocardial infarction)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 28 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:145229 CAPLUS

DN 141:219275

TI Rationale and design of a large-scale trial using atrial natriuretic peptide (ANP) as an adjunct to percutaneous coronary intervention for ST-segment elevation acute myocardial infarction: Japan-working groups of acute myocardial infarction for the reduction of necrotic damage by ANP (J-WIND-ANP)

AU Asakura, Masanori; Kim, Jiyoong; Minamino, Tetsuo; Shintani, Yasunori; Asanuma, Hiroshi; Kitakaze, Masafumi

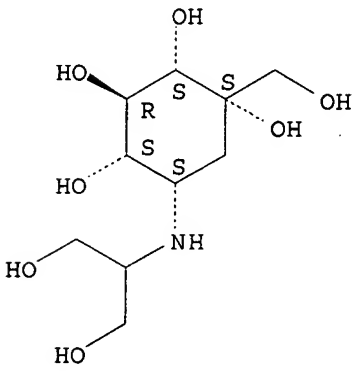
CS J-WIND Investigators, Japan Society for the Promotion of Science for Young Scientists, Osaka University Graduate School of Medicine, Suita, Japan

SO Circulation Journal (2004), 68(2), 95-100
CODEN: CJIOBY; ISSN: 1346-9843

PB Japanese Circulation Society

DT Journal
LA English
AB Background: The benefits of percutaneous coronary intervention (PCI) in acute myocardial infarction (AMI) are limited by reperfusion injury. In animal models, atrial natriuretic peptide (ANP) reduces infarct size, so the Japan-Working groups of acute myocardial Infarction for the reduction of Necrotic Damage by ANP (J-WIND-ANP) designed a prospective, randomized, multicenter study, to evaluate whether ANP as an adjunctive therapy for AMI reduces myocardial infarct size and improves regional wall motion. Methods and Results: Twenty hospitals in Japan will participate in the J-WIND-ANP study. Patients with AMI who are candidates for PCI are randomly allocated to receive either i.v. ANP or placebo administration. The primary end-points are (1) estimated infarct size (Σ-creatine kinase and troponin T) and (2) left ventricular function (left ventriculograms). Single nucleotide polymorphisms (SNPs) that may be associated with the function of ANP and susceptibility of AMI will be examined Furthermore, a data mining method will be used to design the optimal combinational therapy for post-MI patients. Conclusions: J-WIND-ANP will provide important data on the effects of ANP as an adjunct to PCI for AMI and the SNPs information will open the field of tailor-made therapy. The optimal therapeutic drug combination will also be determined for post-MI patients.
IT 83480-29-9, Voglibose
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(drug therapy for data mining of cardiovascular therapy combination; large-scale trial rationale and design using atrial natriuretic peptide (ANP) as adjunct to PCI for ST-segment elevation acute myocardial infarction patients)
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 29 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:19904 CAPLUS
DN 140:65242
TI Rapidly disintegrating solid preparations of α-glucosidase inhibitors and their manufacture
IN Okochi, Kazuhiro; Koyama, Hiroyoshi
PA Takeda Chemical Industries, Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 19 pp.
CODEN: JKXXAF
DT Patent
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004002326	A2	20040108	JP 2003-77049	20030320
PRAI	JP 2002-81465	A	20020322		

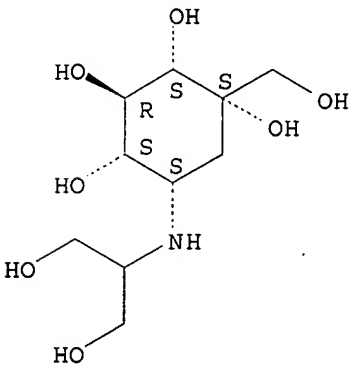
AB The prepns. for treatment of diabetes contain α-glucosidase inhibitors, carbohydrates, hydroxypropyl cellulose (I), disintegrants, and crystalline cellulose (II). The prepns. are manufactured by granulating a mixture of carbohydrates, disintegrants, and II while spraying an aqueous solution of α-glucosidase inhibitors and I. This method gives rapidly-disintegrating prepns. having moderate hardness with reduced loss of α-glucosidase inhibitors during manufacture A mixture of D-mannitol 510.5, crystalline II 66, crospovidone 33, and corn starch 15 g was granulated while spraying an aqueous solution containing voglibose 0.9, I 3.3, and yellow Fe2O3 0.75 g. The granules (524.5 g) thus obtained were mixed with 20 g corn starch and 5.5 g Mg stearate and compressed to give tablets (220 mg/tablet). The tablets showed hardness 33.2 N and disintegration time 0.3-0.4 min.

IT 83480-29-9, Voglibose
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(manufacture of rapidly disintegrating solid prepns. of α-glucosidase inhibitors containing carbohydrates, hydroxypropyl cellulose, disintegrants, and crystalline cellulose)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 30 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:3643 CAPLUS

DN 140:71537

TI Uses of polypeptides acting as both GLP-1 receptor agonists and glucagon receptor antagonists in the treatment of diabetes and other metabolic diseases

IN Pan, Clark; Whelan, James; Clairmont, Kevin B.

PA Bayer Pharmaceuticals Corporation, USA

SO U.S. Pat. Appl. Publ., 27 pp., Cont.-in-part of U.S. Ser. No. 265,345.
CODEN: USXXCO

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004002442	A1	20040101	US 2003-345751	20030116
	US 7041646	B2	20060509		
	US 2003124669	A1	20030703	US 2002-265345	20021003

	US 6864069	B2	20050308		
	US 2005153890	A1	20050714	US 2004-999622	20041129
	US 2005288248	A1	20051229	US 2005-212439	20050826
	US 2006003934	A1	20060105	US 2005-213023	20050826
	US 2006003935	A1	20060105	US 2005-213024	20050826
	US 2006003417	A1	20060105	US 2005-213026	20050826
	US 2006003418	A1	20060105	US 2005-213083	20050826
	US 2006003419	A1	20060105	US 2005-213087	20050826
PRAI	US 2001-327730P	P	20011005		
	US 2002-265345	A2	20021003		
	US 2002-408288P	P	20020906		
	US 2003-345751	A3	20030116		

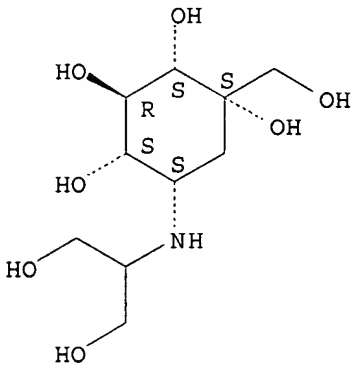
AB The invention provides polypeptides that act both as an agonist of the GLP-1 receptor and an antagonist of the glucagon receptor. Such polypeptides are useful for treating individuals with type 2 diabetes or other metabolic disorders.

IT 83480-29-9, Voglibose
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(co-administered with the polypeptide; polypeptides acting as both GLP-1 receptor agonists and glucagon receptor antagonists and their pharmacol. methods of use)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 31 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:777746 CAPLUS

DN 139:277115

TI Process for preparation of voglibose

IN Shogaki, Takeshi; Kakita, Takao; Yagi, Suguru

PA Sawai Pharmaceutical Co., Ltd., Japan

SO PCT Int. Appl., 26 pp.
CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003080561	A1	20031002	WO 2002-JP10687	20021015

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

	AU 2002344083	A1	20031008	AU 2002-344083	20021015
	US 2005165257	A1	20050728	US 2003-509059	20021015
PRAI	JP 2002-88321	A	20020327		
	WO 2002-JP10687	W	20021015		

OS CASREACT 139:277115; MARPAT 139:277115

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention provides a process by which voglibose can be safely and easily prepared at a low cost; intermediates favorably usable in the process; and a process for preparation of the intermediates, specifically, inositol derivs. represented by the general formula (I) (wherein Prt is a hydroxyl-protecting group); a process for the preparation of the inositol derivs. which comprises dihydroxyaminating a cyclohexanone compound represented by the general formula (II) (wherein Prt is as defined above) with a dihydroxyaminating agent and a reducing agent; and a process for the preparation of voglibose represented by formula (III) which comprises oxidizing an inositol derivative of the general formula I and deblocking the resulting inositol compound Voglibose is an α-glucosidase inhibitor and useful for the treatment of diabetes. Thus, a suspension of 2.0 g Me 6-deoxy-2,3,4-tri-O-benzyl-α-D-xylo-5-hexenopyranoside in a mixture of 60 mL dioxane and 30 mL H2O was heated in the presence of 39 mg PdCl2 at 45° with stirring to give, after workup and crystallization from hexane, 72.4% [2S-(2α,3β,4α,5αβ)]-5-hydroxy-2,3,4-tris(benzyloxy)cyclohexanone (IV) which (4.33 g) was dissolved in 90 mL toluene, cooled to -78°, treated dropwise with a THF solution of 1.0 M vinylmagnesium bromide (50 mL), stirred at -78° for 2 h and at room temperature for 1 h, and carefully treated with 100 mL 1 M aqueous HCl solution, to give after workup and silica gel chromatog., a mixture of 3-deoxy-2-C-ethenyl-1,5,6-tri-O-benzyl-D-epi-inositol and 3-deoxy-2-C-ethenyl-1,5,6-tri-O-benzyl-D-myo-inositol (V) in 65.8% yield. V (2.99 g) was dissolved in 15 mL DMSO and 5.43 mL Et3N, treated dropwise with a solution of 3.10 g sulfur trioxide-pyridine complex in 15 mL DMSO, stirred at room temperature for 1 h to give, after workup and silica gel chromatog., 83.7% II (Prt = benzyl) which (1.50 g) was stirred with 2-amino-1,3-propanediol in 25 mL dry MeOH at room temperature for 20 h, treated with 742 mg NaBH4 under ice-cooling, and stirred at room temperature for 16 h to give, after workup and silica gel chromatog., 72.6% III (Prt = benzyl) (VI). A solution of 700 mg VI in 30 mL CH2Cl2/MeOH (4/1) underwent ozonolysis at -78° for .apprx.4 h, treated with 198 mg NaBH4, stirred at room temperature for 1 h, and acidified to pH 4 by adding 1 M aqueous HCl solution to give, after silica gel chromatog., 85.5% I (Prt = benzyl) which (100 mg) was dissolve din 1.9 mL MeOH, successively treated with 0.1 mL 90% formic acid and 20 mg palladium black, stirred at 60° for 6 h, and suction-filtered to remove the catalyst followed by washing the catalyst with 3 mL MeOH/H2O (1/1). Evaporation of the combined solvent from the filtrate and the washing under reduced pressure, column chromatog. purification using Dowex 50WX8 and Amberlite CG-50, and crystallization from ethanol gave 65.0% III (voglibose).

IT 83480-29-9P, Voglibose

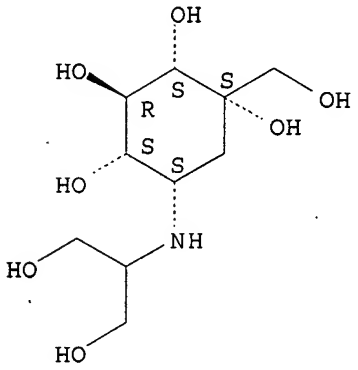
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of voglibose as α-glucosidase inhibitor for treatment of diabetes in multisteps from Me 6-deoxy-2,3,4-tri-O-benzyl-α-D-xylo-5-hexenopyranoside)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 32 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:757550 CAPLUS

DN 139:255382

TI Methods of treating diabetes using PDE11a inhibitors

IN Vasavada, Haren

PA Bayer Pharmaceuticals Corporation, USA

SO PCT Int. Appl., 24 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003077949	A2	20030925	WO 2003-US8132	20030314
	WO 2003077949	A3	20040325		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2477832	AA	20030925	CA 2003-2477832	20030314
	AU 2003220342	A1	20030929	AU 2003-220342	20030314
	EP 1496940	A2	20050119	EP 2003-716641	20030314
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	BR 2003008415	A	20050215	BR 2003-8415	20030314
	JP 2005527524	T2	20050915	JP 2003-576002	20030314
	CN 1697661	A	20051116	CN 2003-805986	20030314
	US 2005215489	A1	20050929	US 2004-504695	20040812
	ZA 2004008185	A	20051011	ZA 2004-8185	20041011

PRAI US 2002-364697P P 20020314
US 2002-389036P P 20020613
WO 2003-US8132 W 20030314

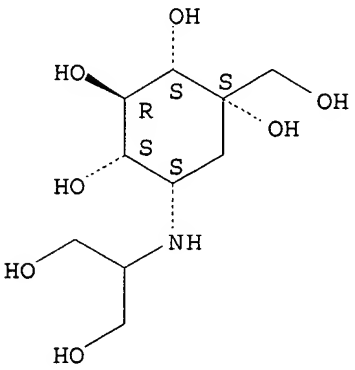
AB Methods of the invention relate to treatment of diabetes, particularly type 2 diabetes, and related disorders by administration of a PDE11A inhibitor. Such PDE11A inhibitors may be administered in conjunction with alpha-glucosidase inhibitors, insulin sensitizers, insulin secretagogues, hepatic glucose output lowering compds., beta3 agonist or insulin. Such PDE11A inhibitors may also be administered in conjunction with body weight reducing agents. Further methods of the invention relate to stimulating insulin release from pancreatic cells, particularly in response to an elevation in blood glucose concentration, by administration of a PDE11A inhibitor.

IT 83480-29-9, Voglibose
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods of treating diabetes using PDE11a inhibitors)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 33 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:386729 CAPLUS

DN 138:402036

TI Preparation of valiolamine and its intermediates

IN Masagaki, Takeshi; Yagi, Takashi; Kakita, Takao

PA Sawai Pharmaceutical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF

DT Patent

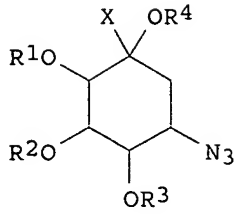
LA Japanese

FAN.CNT 1

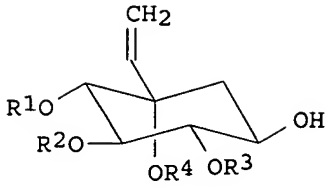
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2003146957	A2	20030521	JP 2001-345259	20011109
PRAI JP 2001-345259		20011109		

OS MARPAT 138:402036

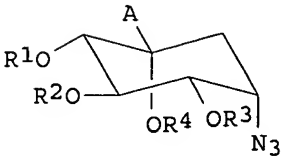
GI



I



III



IV

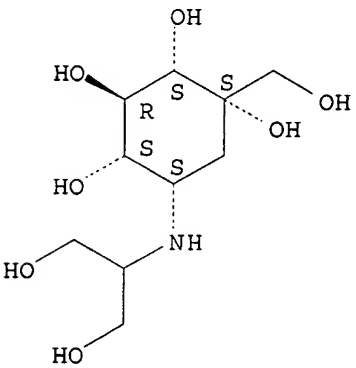
AB Cyclohexane derivs. I (R1-R4 = H, protective group; X = CH:CH2, CH2OH), useful as intermediates for valiolamine (II), are claimed. Also claimed is a method for preparation of II by (1) azidation of alc. III (R1-R4 = H, protective group), (2) oxidation of the resulting IV (A = CH:CH2; R1-R4 = same as in III), and (3) reduction of the resulting IV (A = CH2OH; R1-R4 = same as above). Preparation of II from Me 6-deoxy-2,3,4-tris-O-(phenylmethyl)-α-D-xylo-5-hexenopyranoside with 5 steps was shown. Preparation of voglibose from II was also shown.

IT 83480-29-9P, Voglibose
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(preparation of valiolamine as intermediate for voglibose from deoxyethenylmyoinositols)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 34 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:261846 CAPLUS

DN 138:271665

TI Preparation of 1,6-naphthyridine derivatives as antidiabetics

IN Wang, Yamin; Bullock, William H.; Chen, Libing

PA Bayer Corporation, USA

SO PCT Int. Appl., 357 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003027113	A1	20030403	WO 2002-US30376	20020923
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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	US 6677352	B1	20040113	US 2002-253215	20020923
	US 2004014751	A1	20040122	US 2002-253104	20020923
	US 6900205	B2	20050531		
	EP 1432711	A1	20040630	EP 2002-799627	20020923
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
	BR 2002012864	A	20040817	BR 2002-12864	20020923
	CN 1578780	A	20050209	CN 2002-823019	20020923
	CN 1578781	A	20050209	CN 2002-823021	20020923
	JP 2005504808	T2	20050217	JP 2003-530701	20020923
	US 2004157875	A1	20040812	US 2003-684299	20031010
	US 6964971	B2	20051115		
	NO 2004001560	A	20040511	NO 2004-1560	20040416
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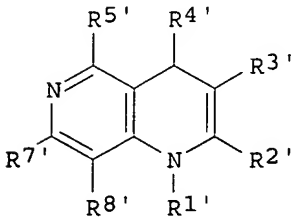
	ZA 2004003064	A	20050422	ZA 2004-3064	20040422
	US 2004209866	A1	20041021	US 2004-834357	20040428
PRAI	US 2001-324511P	P	20010926		
	US 2002-253104	A3	20020923		
	US 2002-253215	A1	20020923		
	WO 2002-US30376	W	20020923		

OS MARPAT 138:271665

GI



I

AB The invention relates generally to naphthyridines and more specifically, to 1,6-naphthyridines (shown as I; variables defined below; e.g. 2-anilino-5-chloro-7-methyl-1-phenyl-1,6-naphthyridin-4(1H)-one) and pharmaceutical compns. containing such derivs. Methods of the invention comprise administration of a naphthyridine derivative of the invention for the treatment of diabetes and related disorders. A typical pos. effect of a compound results in a 12-20% reduction in the glucose AUC relative to the AUC of the vehicle-treated group of male Wistar rats; compds. of present invention have a blood glucose lowering effect in this in vivo assay. Although the methods of preparation are not claimed, .apprx.50 example prepns. of naphthyridines, mostly 1,8-naphthyridin-4(1H)-ones, plus example prepns. of intermediates are included; characterization data for a large number of 1,6- and 1,8-naphthyridin-4(1H)-ones are also included. For I: R1' = C1-8 alkyl, C2-8 alkenyl, C2-8 alkynyl, and A-R9, or R1' = C6-10 aryl, C2-9 heteroaryl with 1-4 heteroatoms = N, S(O)0-2 and

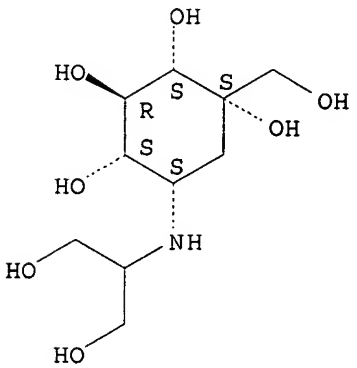
O, C3-8 cycloalkyl, C4-8 cycloalkenyl, 5-7 membered heterocycloalkyl with 3-6 C atoms and 1-2 heteroatoms = N, S(O)0-2 and O, and 5-7 membered heterocycloalkenyl with 3-6 C atoms and 1-2 heteroatoms = N, S(O)0-2 and O. A = C1-8 alkyl, C2-8 alkenyl, C2-8 alkynyl, and C1-8 haloalkyl; R9 = hydroxy, C1-6 alkoxy, C3-6 cycloalkoxy, O-A-R14, NR11R12; or R9 = C6-10 aryl, C2-9 heteroaryl with 1-4 heteroatoms = N, S(O)0-2 and O, C3-8 cycloalkyl, C5-8 cycloalkenyl or R9 = 5-7 membered heterocycloalkyl with 3-6 C atoms and 1-2 heteroatoms = N, S(O)0-2 and O and 5-7 membered heterocycloalkenyl with 3-6 C atoms and 1-2 heteroatoms = N, S(O)0-2 and O. R2' = NR15R16, S(O)0-2R17, and OR17. R3' = C6-10 aryl, C2-9 heteroaryl with 1-4 heteroatoms = N, S(O)0-2 and O, C3-8 cycloalkyl, heterocycloalkyl with 3-6 C atoms and 1-2 heteroatoms = N, S(O)0-2, and O, C4-8 cycloalkenyl, and heterocycloalkenyl with 3-6 C atoms and 1-2 heteroatoms = N, S(O)0-2 and O; or R3' = C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, C1-6 haloalkyl, H, nitro, halogen, NR19R20, A-OR19, A-NR19R20, and A-R20. R4' = O, S, and OR21. R5', R7', and R8' = C3-8 cycloalkyl, C4-8 cycloalkenyl, C6-10 aryl, C2-9 heteroaryl with 1-4 heteroatoms or R5', R7', and R8' = 5-7 membered heterocycloalkyl with 3-6 C atoms and 1-2 heteroatoms = N, S(O)0-2 and O and 5-7 membered heterocycloalkenyl with 3-6 C atoms and 1-2 heteroatoms = N, S(O)0-2 and O or R5', R7', and R8' = H, halogen, nitrile, nitro, hydroxy, C1-8 alkyl, C2-8 alkenyl, C2-8 alkynyl, C1-8 haloalkyl, C1-8 alkoxy, C1-8 haloalkoxy, C3-8 cycloalkoxy, A-R23, A(OR22)R23, NR27R28, A-NR27R28, A-Q-R29, Q-R29, Q-A-NR24R25, C(O)R24, C(O)OR24, C(O)NR24R25, A-C(O)R24, A-C(O)OR24, and A-C(O)NR24R25; addnl. definitions are given in the claims.

IT 83480-29-9, Voglibose
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(α-glucosidase inhibitor; combined with 1,6-naphthyridines as antidiabetics)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideox-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 35 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:261845 CAPLUS

DN 138:271664

TI Preparation of 1,8-naphthyridine derivatives as antidiabetics

IN Wang, Yamin; Gunn, David E.; Liu, Qingjie; Liang, Sidney X.; Bullock, William H.; Liu, Donglei; Magnuson, Steven R.; Li, Tindy; Mull, Eric S.; Wood, Jill E.; Qi, Ning

PA Bayer Corporation, USA

SO PCT Int. Appl., 363 pp.
CODEN: PIXXD2

DT Patent

LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003027112	A1	20030403	WO 2002-US30176	20020923
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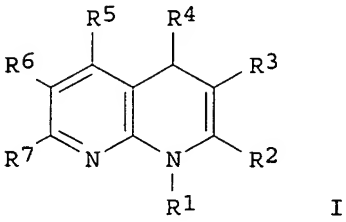
	US 2004014751	A1	20040122	US 2002-253104	20020923
	US 6900205	B2	20050531		
	EP 1432710	A1	20040630	EP 2002-799608	20020923
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
	BR 2002012829	A	20040803	BR 2002-12829	20020923
	CN 1578780	A	20050209	CN 2002-823019	20020923
	CN 1578781	A	20050209	CN 2002-823021	20020923
	JP 2005504807	T2	20050217	JP 2003-530700	20020923
	US 2004157875	A1	20040812	US 2003-684299	20031010
	US 6964971	B2	20051115		
	NO 2004001567	A	20040511	NO 2004-1567	20040416
	ZA 2004003063	A	20050422	ZA 2004-3063	20040422
	ZA 2004003064	A	20050422	ZA 2004-3064	20040422
	US 2004209866	A1	20041021	US 2004-834357	20040428
PRAI	US 2001-324511P	P	20010926		
	US 2002-253104	A3	20020923		
	US 2002-253215	A1	20020923		
	WO 2002-US30176	W	20020923		

OS MARPAT 138:271664
GI



I

AB The invention relates generally to naphthyridines and more specifically, to 1,8-naphthyridines (shown as I; variables defined below; e.g. 2-anilino-1,7-diphenyl-5-(trifluoromethyl)-1,8-naphthyridin-4(1H)-one) and pharmaceutical compns. containing such derivs. Methods of the invention comprise administration of a naphthyridine derivative of the invention for the treatment of diabetes and related disorders. A typical pos. effect of a compound results in a 12-20% reduction in the glucose AUC relative to the AUC of the vehicle-treated group of male Wistar rats; compds. of present invention have a blood glucose lowering effect in this in vivo assay. Although the methods of preparation are not claimed, .apprx.50 example prepns. of naphthyridines, mostly 1,8-naphthyridin-4(1H)-ones but also some 1,6-naphthyridin-4(1H)-ones, plus example prepns. of intermediates are included; characterization data for a large number of 1,6-

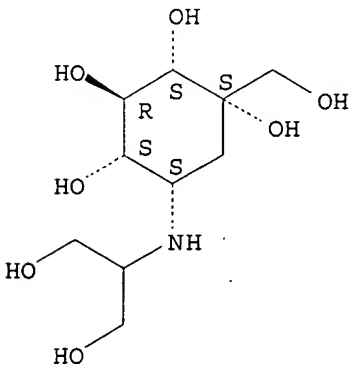
and 1,8-naphthyridin-4(1H)-ones are also included. The examples section appears to be identical to that of patent WO 03/027113 A1 (CAPLUS accession number 2003:261846). For I: R1 = C1-8 alkyl, C2-8 alkenyl, C2-8 alkynyl, and A-R9, or R1 = C6-10 aryl, C2-9 heteroaryl with 1-4 heteroatoms = N, S(O)0-2 and O, C3-8 cycloalkyl, C4-8 cycloalkenyl, 5-7 membered heterocycloalkyl with 3-6 C atoms and 1-2 heteroatoms = N, S(O)0-2 and O, and 5-7 membered heterocycloalkenyl with 3-6 C atoms and 1-2 heteroatoms = N, S(O)0-2 and O. A = C1-8 alkyl, C2-8 alkenyl, C2-8 alkynyl, and C1-8 haloalkyl; R9 = hydroxy, C1-6 alkoxy, C3-6 cycloalkoxy, O-A-R14, NR11R12; or R9 = C6-10 aryl, C2-9 heteroaryl with 1-4 heteroatoms = N, S(O)0-2 and O, C3-8 cycloalkyl, C5-8 cycloalkenyl or R9 = 5-7 membered heterocycloalkyl with 3-6 C atoms and 1-2 heteroatoms = N, S(O)0-2 and O and 5-7 membered heterocycloalkenyl with 3-6 C atoms and 1-2 heteroatoms = N, S(O)0-2 and O. R2 = NR15R16, S(O)0-2R17, and OR17. R3 = C6-10 aryl, C2-9 heteroaryl with 1-4 heteroatoms = N, S(O)0-2 and O, C3-8 cycloalkyl, heterocycloalkyl with 3-6 C atoms and 1-2 heteroatoms = N, S(O)0-2, and O, C4-8 cycloalkenyl, and heterocycloalkenyl with 3-6 C atoms and 1-2 heteroatoms = N, S(O)0-2 and O; or R3 = C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, C1-6 haloalkyl, H, nitro, halogen, NR19R20, A-OR19, A-NR19R20, and A-R20. R4 = O, S, and OR21. R5, R6 and R7 = C3-8 cycloalkyl, C4-8 cycloalkenyl, C6-10 aryl, C2-9 heteroaryl with 1-4 heteroatoms or R5, R6 and R7 = 5-7 membered heterocycloalkyl with 3-6 C atoms and 1-2 heteroatoms = N, S(O)0-2 and O and 5-7 membered heterocycloalkenyl with 3-6 C atoms and 1-2 heteroatoms = N, S(O)0-2 and O or R5, R7, and R8 = H, halogen, nitrile, nitro, hydroxy, C1-8 alkyl, C2-8 alkenyl, C2-8 alkynyl, C1-8 haloalkyl, C1-8 alkoxy, C1-8 haloalkoxy, C3-8 cycloalkoxy, A-R23, A(OR22)R23, NR27R28, A-NR27R28, A-Q-R29, Q-R29, Q-A-NR24R25, C(O)R24, C(O)OR24, C(O)NR24R25, A-C(O)R24, A-C(O)OR24, and A-C(O)NR24R25; addnl. definitions and provisos are given in the claims.

IT 83480-29-9, Voglibose
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(α-glucosidase inhibitor; combined with 1,8-naphthyridines as antidiabetics)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 36 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:42064 CAPLUS

DN 138:95600

TI Use of antidiabetics for making a medicine with cicatrizing effect

IN Briet, Philippe

PA Merck Sante, Fr.

SO PCT Int. Appl., 12 pp.
CODEN: PIXXD2
DT Patent
LA French
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003003971	A2	20030116	WO 2002-FR2124	20020619
	WO 2003003971	A3	20031204		
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	FR 2826278	A1	20021227	FR 2001-8130	20010620
	FR 2826278	B1	20050325		
	AU 2002319381	A1	20030121	AU 2002-319381	20020619
	EP 1397124	A2	20040317	EP 2002-748965	20020619
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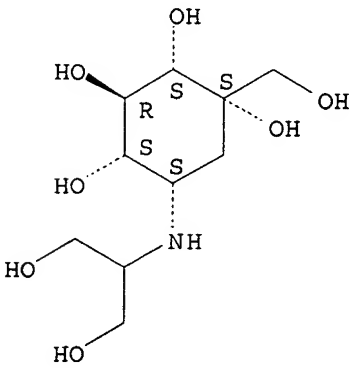
	US 2004147430	A1	20040729	US 2003-479615	20031204
PRAI	FR 2001-8130	A	20010620		
	US 2001-299196P	P	20010620		
	WO 2002-FR2124	W	20020619		

OS MARPAT 138:95600
AB The invention concerns the use of at least an antidiabetic selected among compds. stimulation insulin secretion, glucosidase inhibitors, thiazolidine-diones, insulin, agents enhancing insulin sensitivity, the glucagon-like peptide-1 (GLP-1), PPARα/γ agonists, meglitinide and aP2 inhibitors for making a medicine with cicatrizing effect.
IT 83480-29-9, Voglibose
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(use of antidiabetics for making medicine with cicatrizing effect)
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 37 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN

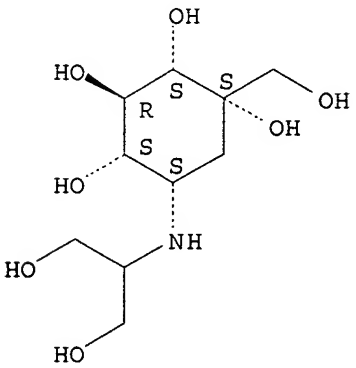
AN 2002:888532 CAPLUS
DN 137:358192
TI Rapidly disintegratable solid preparation
IN Ohkouchi, Kazuhiro; Koyama, Hiroyoshi
PA Takeda Chemical Industries, Ltd., Japan
SO PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002092058	A1	20021121	WO 2002-JP4641	20020514
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	JP 2003034655	A2	20030207	JP 2002-139116	20020514
PRAI	JP 2001-145215	A	20010515		

AB A rapidly disintegratable solid preparation comprises (1) an active ingredient, (2) a sugar and/or a sugar alc., (3) a cellulose derivative, and (4) a dissoln. aid. The solid preparation can be prepared by a dry method even under a low compression pressure and has a practically acceptable hardness and excellent properties, e.g., rapid disintegration, excellent dissoln. control, and less trouble in manufacturing For example, granules were formulated containing manidipine hydrochloride, starch, hydroxypropyl cellulose, and iron oxide. Sep., granules were formulated containing mannitol, hydroxypropyl cellulose, citric acid, and iron oxide. The both granules, crystalline cellulose, aspartame, and Mg stearate were blended and compressed to give tablets.

IT 83480-29-9, Voglibose
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(excipients for manufacturing rapidly disintegratable solid prepns.)
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



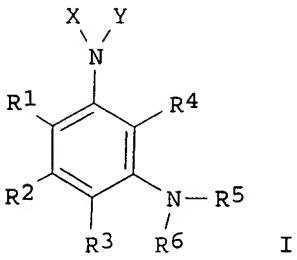
RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 38 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2002:637641 CAPLUS

DN 137:169309
TI Preparation of substituted aminobenzene derivatives as glucocorticoid receptor modulators
IN Link, James T.; Sorensen, Bryan K.; Patel, Jyoti R.; Arendsen, David L.; Li, Gaoquan
PA Abbott Laboratories, USA
SO PCT Int. Appl., 272 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002064550	A1	20020822	WO 2002-US4501	20020212
	WO 2002064550	C1	20021114		
	W: CA, JP, MX				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	CA 2438480	AA	20020822	CA 2002-2438480	20020212
	EP 1363876	A1	20031126	EP 2002-714910	20020212
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
	JP 2005510450	T2	20050421	JP 2002-564483	20020212
PRAI	US 2001-783636	A	20010214		
	US 2002-72548	A	20020208		
	WO 2002-US4501	W	20020212		

OS MARPAT 137:169309
GI



I

AB Gen, hydroxyalkyl, substituted amine; R4 issubstituted aminobenzenes I were prepared and are novel glucocorticoid receptor modulators and are useful for treating type II diabetes in a mammal, wherein R1-R3 are each independently hydrogen, alkoxycarbonyl, alkoxy, alkoxyalkyl, alkyl, alkylcarbonyl, carboxy, halogen, hydroxyalkyl, substituted amine; R4 is hydrogen, alkenyl, alkoxy, alkoxyalkenyl, alkoxyalkoxy, alkoxyalkyl, alkoxyalkynyl, alkoxycarbonyl, alkoxycarbonylalkoxy, alkoxycarbonylalkenyl, alkoxycarbonylalkyl, alkoxycarbonylalkynyl, alkyl, alkylcarbonyl, alkylcarbonylalkenyl, alkylcarbonylalkoxy, alkylcarbonylalkyl, alkylcarbonylalkynyl, alkynyl, carboxy, carboxyalkenyl, carboxyalkyl, carboxyalkynyl, haloalkoxy, haloalkyl, haloalkenyl, haloalkynyl, halogen, hydroxyalkyl, substituted amine; R5 is hydrogen, alkyl; R6 is hydrogen, alkoxycarbonyl, alkoxysulfonyl, alkyl, alkylcarbonyl, alkylsulfonyl, arylalkoxycarbonyl, arylalkylcarbonyl, arylalkylsulfonyl, arylcarbonyl, arylsulfonyl, cycloalkylcarbonyl, cycloalkylalkylcarbonyl, cycloalkylsulfonyl, cycloalkylalkylsulfonyl, heterocyclecarbonyl, heterocyclealkylcarbonyl, heterocyclesulfonyl, heterocyclealkylsulfonyl, amide, aminosulfonyl; X and Y are independently heteroatom-containing hydrocarbon. Thus, N-[3-(dibenzylamino)-2-methylphenyl]ethanesulfonamide was prepared as glucocorticoid receptor

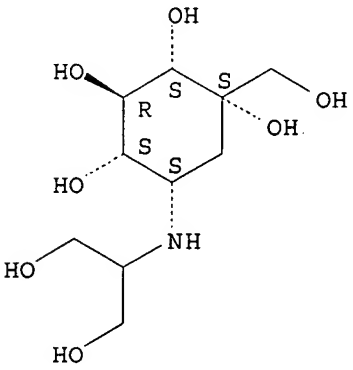
modulator. A method of treating symptoms related to type II diabetes wherein said symptoms are selected from the group consisting of hyperglycemia, hyperinsulinemia, inadequate, glucose clearance, obesity, hypertension and high glucocorticoid levels in a mammal comprising administering a therapeutically effective amount of a compound of title compds. A method of treating diseases associated with an excess or deficiency of glucocorticoids, said diseases selected from the group consisting of diabetes, obesity, Syndrome X, Cushing's Syndrome, Addison's disease, inflammatory diseases such as asthma, rhinitis and arthritis, allergy, autoimmune disease, immunodeficiency, anorexia, cachexia, bone loss or bone frailty, and wound healing comprising administering a therapeutically effective amount of a compound of title compds.

IT 83480-29-9, Voglibose
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(preparation of substituted aminobenzene derivs. as glucocorticoid receptor modulators)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 39 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:71854 CAPLUS

DN 136:123667

TI Antidiabetic combinations containing enzymic nitric oxide donor

IN Szilvassy, Zoltan; Tosaki, Arpad; Nemeth, Jozsef; Kovacs, Peter; Pankucsi, Csaba; Hernadi, Ferenc; Ferninandy, Peter

PA Keri Pharma Kft., Hung.

SO PCT Int. Appl., 56 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002005795	A2	20020124	WO 2001-HU79	20010713
	WO 2002005795	A3	20021219		
	WO 2002005795	B1	20030130		

W: AL, AU, BA, BB, BG, BR, CA, CN, CO, CR, CU, CZ, DM, EC, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

	CA 2415392	AA	20020124	CA 2001-2415392	20010713
	EP 1303304	A2	20030423	EP 2001-954229	20010713
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2004503585	T2	20040205	JP 2002-511728	20010713
	US 2004068005	A1	20040408	US 2003-332946	20031017
PRAI	HU 2000-2628	A	20000714		
	WO 2001-HU79	W	20010713		

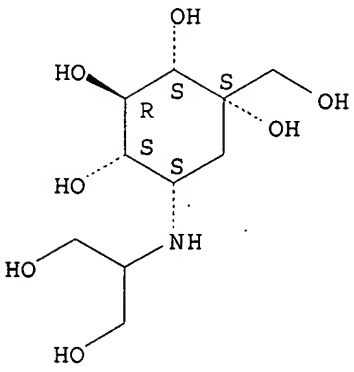
AB Pharmaceutical combinations for treatment and/or prevention of all sorts, periods and complications of diabetes mellitus in mammals, thus including the pre-diabetic diseases and their complications, optionally including furthermore ischemic heart disease comprising an ED of at least one enzymic nitric oxide (NO) donor active ingredient and optionally comprising an ED of at least one antidiabetic active ingredient, and further optionally comprising usual pharmaceutically acceptable carriers and/or other auxiliaries. The combination may consist of more than one pharmaceutical compns. The EDs related to the new insulin-sensitizing effect are considerably lower than the usual doses related to the known effect of most active substances dues to metabolic effects that influence insulin sensitivity in healthy and insulin resistant mammals. The usual dose of NO-donors is necessary when the patient has also ischemic heart disease. Preferred antidiabetics include insulin, a thiazolidinedion, a biguanide derivative, an α-glucosidase-inhibitor, an α2-adrenergic-antagonist and/or a sulfonamide, preferably a sulfonylurea. Preferred enzymic NO donors are nitroglycerin, racemic isosorbide mononitrate, and/or its stereoisomers, racemic isosorbide dinitrate and/or its stereoisomers, erythrityl tetranitrate, pentaerythritol-tetranitrate, methylpropyl-propanediol-dinitrate, propatyl nitrate, trolnitrate, tenitramine and/or nicorandil. The invention includes methods of treatment and processes to prepare the compns.

IT 83480-29-9, Voglibose
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antidiabetic combinations containing enzymic nitric oxide donor)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 40 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:51257 CAPLUS

DN 136:123595

TI A combination of phosphonate or phosphorodiamidate FBPase inhibitors and antidiabetic agents useful for the treatment of diabetes

IN Van Poelje, Paul D.; Erion, Mark D.; Fujiwara, Toshihiko

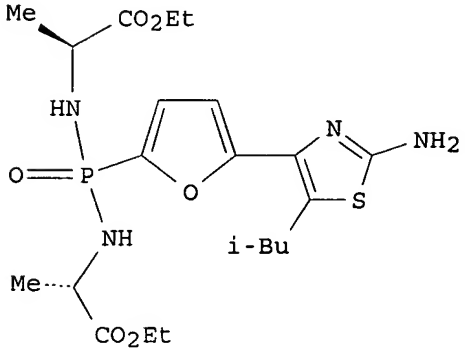
PA Metabasis Therapeutics, Inc., USA; Sankyo Company, Ltd.

SO PCT Int. Appl., 392 pp.

CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002003978	A2	20020117	WO 2001-US21557	20010705
	WO 2002003978	A3	20031016		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2412142	AA	20020117	CA 2001-2412142	20010705
	US 2003073728	A1	20030417	US 2001-900364	20010705
	BR 2001012212	A	20031230	BR 2001-12212	20010705
	EP 1372660	A2	20040102	EP 2001-952530	20010705
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2004508297	T2	20040318	JP 2002-508433	20010705
	CN 1599612	A	20050323	CN 2001-814924	20010705
	NZ 523227	A	20050429	NZ 2001-523227	20010705
	ZA 2003000044	A	20040506	ZA 2003-44	20030102
	NO 2003000034	A	20030305	NO 2003-34	20030103
	AU 2006201410	A1	20060427	AU 2006-201410	20060404
PRAI	US 2000-216531P	P	20000706		
	US 2001-900364	A	20010705		
	US 2000-215126P	P	20000629		
	AU 2001-73271	A3	20010705		
	WO 2001-US21557	W	20010705		

OS MARPAT 136:123595
GI



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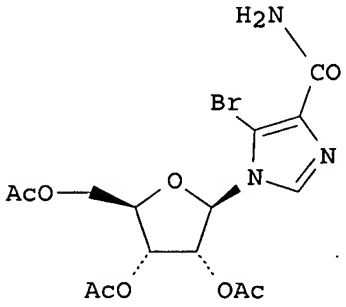


II

AB A combination therapy of at least one FBPase inhibitor ((R1Y)2P(O)M and R14C(O)(CR12R13)nN(R18)P(O)(NR15R16)M; e.g. 2-amino-5-propylthio-4-(5-phosphono-2-furanyl)thiazole monohydrobromide and 2-amino-5-isobutyl-4-[2-[N,N'-bis[(S)-1-(ethoxycarbonyl)ethyl]phosphonodiamido]-5-furanyl]thiazole (shown as I)) and at least one other antidiabetic agent (insulin secretagogue; e.g. glyburide, a sulfonylurea) is disclosed. (R1Y)2P(O)M and R14C(O)(CR12R13)nN(R18)P(O)(NR15R16)M are converted in vivo or in vitro to MPO32-, which inhibit FBPase; the substituents are defined in the claims. General methods and about 15 specific example prepns.

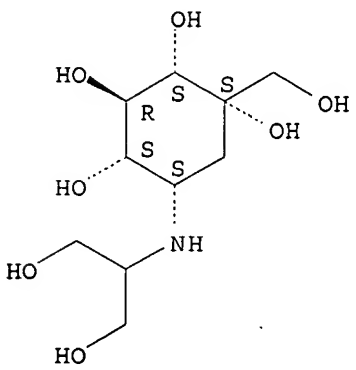
of the phosphorus compds. are included but no methods of preparation are claimed. In the biol. examples, data is presented for the following for selected phosphorus compds. and other materials: inhibition of human liver FBPase, inhibition of rat liver and mouse liver FBPase, inhibition of gluconeogenesis by an FBPase inhibitor in rat hepatocytes, inhibition of glucose prodn. and elevation of fructose-1,6-bisphosphate levels in rat hepatocytes treated with FBPase inhibitors, anal. of hepatic and plasma drug metabolite levels, blood glucose, and hepatic fructose 1,6-bisphosphate levels after administration of compound A (shown as II) p.o. to normal fasted rats, anal. of hepatic and plasma drug levels after administration of compds. i.p. to normal fasted rats, oral bioavailability determination of two compds. and oral glucose lowering activity of two compds. For insulin secretagogues: insulin release from pancreatic islets, glucose lowering in the fasted rat, i.v. glucose tolerance in the fasted rat, oral glucose tolerance in the Zucker diabetic fatty rat, insulin secretion in the rat, inhibition of KATP-channels in mouse pancreatic beta-cells, and sulfonylurea receptor binding. Also included are: inhibition of dipeptidyl peptidase IV (DPP-IV inhibitors), alpha-glucosidase assay, glycogen phosphorylase assay, assay of glucose 6-phosphatase inhibitors, glucagon antagonist assay, amylin agonist assay, fatty acid oxidation inhibitor assay, glucose lowering in the db/db mouse (FBPase inhibitor), glucose lowering in the ZDF rat, acute combination treatment of an insulin secretagogue and an FBPase inhibitor in the ZDF rat, chronic combination treatment of an insulin secretagogue and an FBPase inhibitor in the ZDF rat, acute combination treatment of insulin and an FBPase inhibitor in db/db mice, beneficial effect of chronic combination treatment of insulin and an FBPase inhibitor in db/db mice, and beneficial effect of chronic combination treatment of insulin and an FBPase inhibitor in db/db Mice. Also included are: acute combination treatment of insulin and an FBPase inhibitor in the Goto-Kakizaki rat, acute combination treatment of a biguanide and an FBPase inhibitor in db/db mice, acute combination treatment of an alpha glucosidase inhibitor and an FBPase inhibitor in Goto-Kakizaki rats, acute combination treatment of a glycogen phosphorylase inhibitor and an FBPase inhibitor in db/db or ob/ob mice, acute combination treatment of a glucose-6-phosphatase inhibitor and an FBPase inhibitor in db/db or ob/ob mice, acute combination treatment of an FBPase inhibitor and an amylin agonist, chronic combination treatment of a fatty acid oxidation inhibitor and an FBPase inhibitor in the streptozotocin-induced diabetic rat.

IT 83480-29-9, Voglibose
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(insulin secretagogue; combination of phosphonate or phosphorodiamidate FBPase inhibitors and antidiabetic agents useful for treatment of diabetes)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

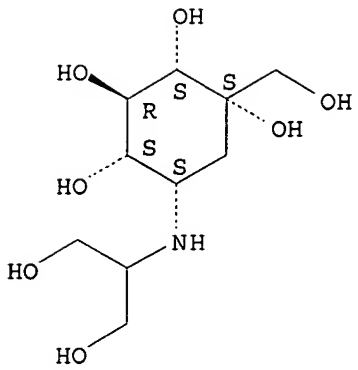


L5 ANSWER 41 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2001:935405 CAPLUS
DN 136:48456
TI Combinations of depeptidyl peptidase IV inhibitors and other antidiabetic agents for the treatment of diabetes mellitus
IN Arch, Jonathan Robert Sanders; Lenhard, James Martin
PA Smithkline Beecham PLC, UK; Smithkline Beecham Corporation
SO PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001097808	A1	20011227	WO 2001-GB2696	20010619
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2413299	AA	20011227	CA 2001-2413299	20010619
	EP 1292300	A1	20030319	EP 2001-938472	20010619
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	BR 2001011800	A	20030527	BR 2001-11800	20010619
	JP 2003535898	T2	20031202	JP 2002-503292	20010619
	BG 107385	A	20030930	BG 2002-107385	20021212
	NO 2002006038	A	20030203	NO 2002-6038	20021216
	ZA 2003000203	A	20040326	ZA 2003-203	20030108
	US 2003166578	A1	20030904	US 2003-311446	20030220
	US 7078397	B2	20060718		
	AU 2005232303	A1	20051201	AU 2005-232303	20051111
PRAI	GB 2000-14969	A	20000619		
	AU 2001-64148	A3	20010619		
	WO 2001-GB2696	W	20010619		

AB A method for the treatment of diabetes mellitus, especially Type 2 diabetes and conditions associated with diabetes mellitus in a mammal, e.g. a human, comprises administering an effective, nontoxic and pharmaceutically acceptable amount of a dipeptidyl peptidase IV inhibitor and another antidiabetic agent to a mammal in need thereof.
IT 83480-29-9, Voglibose
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(depeptidyl peptidase IV inhibitor combination with other antidiabetic agent for treatment of diabetes mellitus)
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

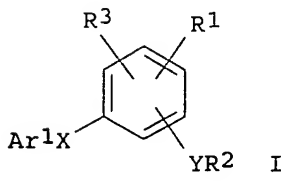


RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 42 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2001:816444 CAPLUS
DN 135:352829
TI Combination therapeutic compositions containing benzene compounds
IN Jaen, Juan C.; Chen, Jin-Long
PA Tularik Inc., USA
SO PCT Int. Appl., 57 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001082916	A2	20011108	WO 2001-US14393	20010502
	WO 2001082916	A3	20020704		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 2002037928	A1	20020328	US 2001-847887	20010502
	US 6653332	B2	20031125		
	US 2004259918	A1	20041223	US 2003-456932	20030605
	US 2006035928	A1	20060216	US 2005-258817	20051026
PRAI	US 2000-201613P	P	20000503		
	US 2001-847887	A1	20010502		
	US 2003-456932	A1	20030605		

OS MARPAT 135:352829
GI



I

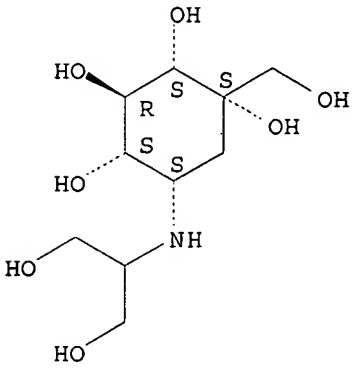
AB The present invention provides pharmaceutical compns. and methods for the treatment of diabetes mellitus using combination therapy. The compns. relate to a benzene compound and an antidiabetic agent such as sulfonylureas, biguanides, glitazones, α-glucosidase inhibitors, potassium channel antagonists, aldose reductase inhibitors, glucagon antagonists, activators of RXR, insulin therapy or other anti-obesity agent. The methods include the administration of the combination of benzene compound with antidiabetic agent where the two components are delivered in a simultaneous manner, where the benzene compound is administered first, followed by the antidiabetic agent, as well as wherein the antidiabetic agent is delivered first followed by the benzene compound For example, the benzene compound (I) was synthesized using a 5-amino-2-(3-chloro-5-pyridyloxy)benzonitrile (0.457 g) in methylene chloride to which was added 2,4-dichlorobenzenesulfonyl chloride (0.456 g), followed by pyridine (150 μL). The reaction progress was monitored by TLC, and upon completion the solvent was removed under vacuum. The resulting residue was partitioned between methylene chloride and water. The organic layer was drawn off and concentrated The residue was triturated with ether to provide 0.447 g of I as a white solid, m.p. 154-156°.

IT 83480-29-9, Voglibose
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(benzene compds. in combination therapy for diabetes and diabetes-related disorders)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 43 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:709687 CAPLUS

DN 135:272869

TI Synthesis of indolyl-amides as glycogen phosphorylase inhibitors for treatment of type 2 diabetes

IN Treadway, Judith Lee

PA Pfizer Products Inc., USA

SO Eur. Pat. Appl., 78 pp.
CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1136071	A2	20010926	EP 2001-301979	20010305
	EP 1136071	A3	20030326		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

	JP 2001302546	A2	20011031	JP 2001-78839	20010319
	CA 2341344	AA	20010922	CA 2001-2341344	20010320
	ZA 2001002318	A	20020920	ZA 2001-2318	20010320
	US 2003004162	A1	20030102	US 2001-813335	20010320
	NZ 510677	A	20021025	NZ 2001-510677	20010321
PRAI	US 2000-191381P	P	20000322		

OS MARPAT 135:272869

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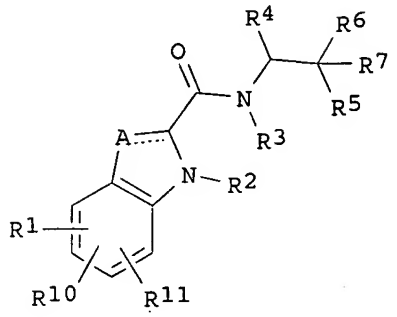

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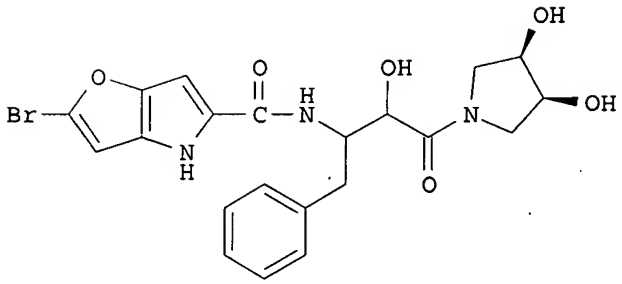


II

AB Title compds. I [A = CH, C-alkyl, C-halo when the dotted line is a bond; A = CH2, CH-alkyl when the dotted line is not a bond; R1, R10, R11 = H, halo, 4-, 6- or 7-NO2, CN, alkyl, alkoxy, (di/tri)fluoromethyl; R2 = H; R3 = H, alkyl; R4 = H, (hydroxy)alkyl, alkoxy-alkyl, phenyl(hydroxy)alkyl, thienyl-alkyl, etc.; R5 = H, OH, F, alkyl, alkoxy, alkanoyl, amino-alkoxy, etc.; R7 = H, F, alkyl; or R5 and R7 can be taken together to be oxo; R6 = carboxy, alkoxycarbonyl, amido, acyl, alkyl, OH, alkoxy; R9 = H, alkyl, OH, alkoxy, methyleneperfluorinated-alkyl, Ph, pyridyl, thienyl, etc.] and derivs. were prepared Over 50 examples were reported. For instance, 2-bromo-4H-furo[3,2-b]pyrrole-5-carboxylic acid was coupled to 2-amino-1-(3,4-dihydroxypyrrolidin-1-yl)-3-phenylpropan-1-one hydrochloride (DCM, DMF, HOBt, EDC, room temperature) to give amide II. Compds.

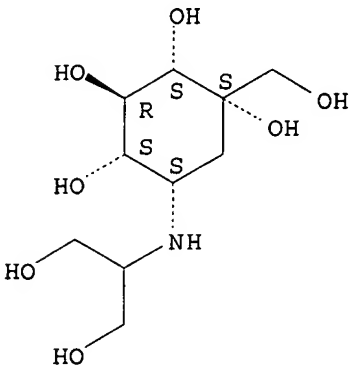
I are glycogen phosphorylase inhibitors. used for treating type 2 diabetes mellitus in cases which have not yet presented, but in which there is an increased risk of developing such condition. Combination therapies of I and non-glycogen phosphorylase inhibiting anti-diabetic agents are also claimed.

IT 83480-29-9, Voglibose

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical in combination with; synthesis of indolyl-amides as glycogen phosphorylase inhibitors for treatment of

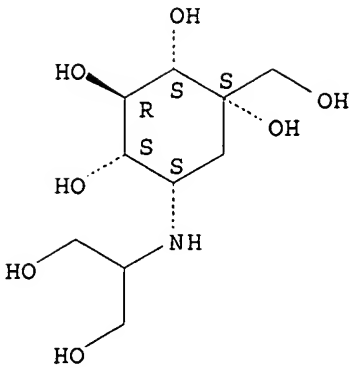
type 2 diabetes)
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 44 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2000:643765 CAPLUS
DN 134:2045
TI Evaluation of α-glucosidase inhibition by using an immobilized assay system
AU Oki, Tomoyuki; Matsui, Toshiro; Matsumoto, Kiyoshi
CS Division of Bioresource and Bioenvironmental Sciences, Faculty of Agriculture, Graduate School Kyushu University, Fukuoka, 812-8581, Japan
SO Biological & Pharmaceutical Bulletin (2000), 23(9), 1084-1087
CODEN: BPBLEO; ISSN: 0918-6158
PB Pharmaceutical Society of Japan
DT Journal
LA English
AB The inhibitory effects of natural and synthetic inhibitors on the intestinal membrane-bound hydrolase, α-glucosidase (AGH), were evaluated by using an immobilized cyanogen bromide-activated Sepharose 4B support. Immobilized AGH (iAGH) inhibition study by synthetic inhibitors (acarbose and voglibose) revealed that the magnitude of inhibition differed from that in the free AGH (fAGH) study: IC50 value of acarbose in iAGH-maltase assay system, 340-430 nM; fAGH, 11 nM. IAGH-maltase inhibition by both inhibitors was influenced by blocking reagents with different functional groups (COOH, OH, CH3, and NH2 groups). On the other hand, significant iAGH-sucrase inhibitory activity was observed only when using the neg. charged support induced by 0.1 M β-alanine. The Km values obtained in the iAGH assay system were similar to those from the fAGH method. With natural inhibitors, the iAGH-sucrase inhibitory activity of D-xylose, with in vivo glucose suppression, increased twice compared to that in fAGH. Green tea extract gave almost the same inhibition for both AGH assay systems.
IT 83480-29-9, Voglibose
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(evaluation of intestinal α-glucosidase inhibition by using immobilized assay system)
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 45 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2000:335274 CAPLUS
DN 132:343329
TI Combinations comprising a β-agonist and a further antidiabetic agent for the treatment of diabetes mellitus and conditions associated with diabetes
IN Arch, Jonathan Robert Sanders
PA SmithKline Beecham P.L.C., UK
SO PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000027434	A1	20000518	WO 1999-GB3755	19991111
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2350062	AA	20000518	CA 1999-2350062	19991111
	EP 1128845	A1	20010905	EP 1999-954217	19991111
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	TR 200101336	T2	20011121	TR 2001-200101336	19991111
	BR 9915214	A	20011218	BR 1999-15214	19991111
	JP 2002529430	T2	20020910	JP 2000-580663	19991111
	AU 766928	B2	20031023	AU 2000-10634	19991111
	NO 2001002300	A	20010703	NO 2001-2300	20010510
	ZA 2001003792	A	20020610	ZA 2001-3792	20010510
	US 2003073644	A1	20030417	US 2002-243164	20020913
PRAI	GB 1998-24789	A	19981111		
	GB 1998-24790	A	19981111		
	GB 1998-24791	A	19981111		
	WO 1999-GB3755	W	19991111		
	US 2001-831651	B1	20010711		

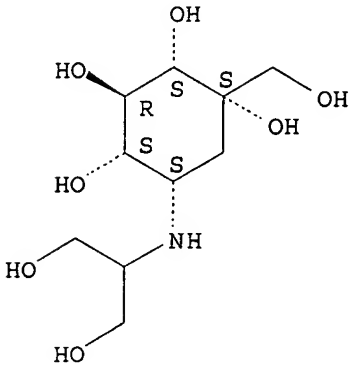
AB A method for the treatment of diabetes mellitus and conditions associated with diabetes mellitus in a mammal such as a human comprises administering an effective, nontoxic and pharmaceutically acceptable amount of a β-agonist and another antidiabetic agent.
IT 83480-29-9, Voglibose
RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(β-agonist-antidiabetic combination for treatment of diabetes mellitus and conditions associated with diabetes)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 46 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:183958 CAPLUS

DN 132:329748

TI Inhibition of progressive reduction of islet β-cell mass in spontaneously diabetic goto-kakizaki rats by α-glucosidase inhibitor

AU Koyama, Motoi; Wada, Ryuichi; Mizukami, Hiroki; Sakuraba, Hiroyasu; Odaka, Hiroyuki; Ikeda, Hitoshi; Yagihashi, Soroku

CS Department of Pathology, Hirosaki University School of Medicine, Hirosaki, 036-8562, Japan

SO Metabolism, Clinical and Experimental (2000), 49(3), 347-352
CODEN: METAAJ; ISSN: 0026-0495

PB W. B. Saunders Co.

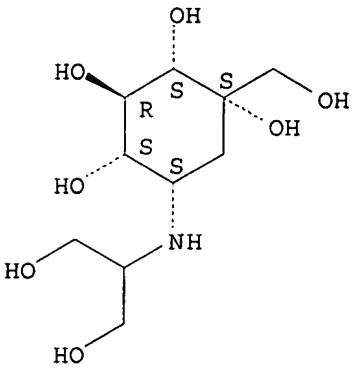
DT Journal

LA English

AB The Goto-Kakizaki (GK) rat, an animal model of type 2 diabetes, exhibits mild hyperglycemia with a reduction of β-cell mass. The mechanism for islet structural changes in this model and whether the changes are affected by metabolic control are not known. In the present study, we examined the process of islet changes in male GK rats aged 6, 8, 12, 24, and 36 wk. Treatment effects with an α-glucosidase inhibitor (Voglibose; Takeda, Osaka, Japan) for 24 wk (12 to 36 wk of age) were also evaluated. The β-cell mass increased until 8 wk of age in both GK and control rats, but the increase was significantly ($P < .01$) smaller in GK rats vs. at 8 wk of age. Thereafter, the β-cell mass decreased in GK rats, whereas it remained constant in controls. Voglibose treatment significantly ($P < .01$) inhibited the reduction of β-cell mass in GK rats. Proliferative activity of β cells as measured by bromodeoxyuridine (BrdU) uptake was significantly ($P < .05$) lower in GK rats vs. control rats at 6 and 8 wk, but the difference disappeared after 12 wk of age, regardless of Voglibose treatment. The present study thus demonstrates a progressive loss of β cells in GK rats that was mitigated by Voglibose treatment. We consider that the β-cell loss in GK rats was due to an early impairment in proliferative activity and reduced survival. Voglibose did not appear to stimulate β-cell proliferation, but exerted its effect via a reduction of hyperglycemia.

IT 83480-29-9, Voglibose
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(α-glucosidase inhibitor inhibition of islet β-cell mass progressive reduction in diabetes)
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

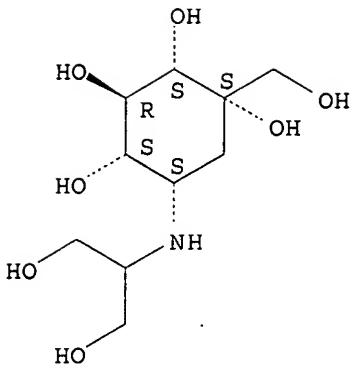
Absolute stereochemistry.



RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

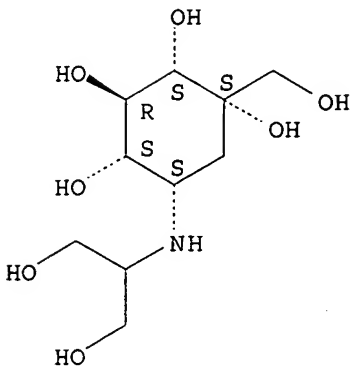
L5 ANSWER 47 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1998:735696 CAPLUS
DN 129:339398
TI Stracture-activity relationship of α-glucosidase inhibitors
AU Fukase, Hiroshi
CS Pharm. Res. Div., Takeda Chem. Ind., Ltd., Osaka, 532, Japan
SO Nippon Yakuzaishikai Zasshi (1998), 50(11), 1977-1982
CODEN: NYZZA3; ISSN: 0369-674X
PB Nippon Yakuzaishikai
DT Journal; General Review
LA Japanese
AB A review with 9 refs., on developmental process, structure-activity relationship, and clin. effects of antidiabetic α-glucosidase inhibitors, acarbose and voglibose.
IT 83480-29-9, Voglibose
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(structure-activity relationships of antidiabetic α-glucosidase inhibitors)
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 48 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1997:742059 CAPLUS
DN 128:57088
TI The α-glucosidase inhibitor voglibose (AO-128) does not change pharmacodynamics or pharmacokinetics of warfarin
AU Fuder, H.; Kleist, P.; Birkel, M.; Ehrlich, a.; Emeklibas, S.; Maslak, W.; Stridde, E.; Wetzelsberger, N.; Wieckhorst, G.; Lucker, P. W.
CS Institut Klinische Pharmakologie Bobenheim, Grunstadt, D-67269, Germany
SO European Journal of Clinical Pharmacology (1997), 53(2), 153-157
CODEN: EJCPAS; ISSN: 0031-6970
PB Springer
DT Journal
LA English
AB Voglibose is a new and potent inhibitor of α-glucosidases and is used for the treatment of diabetes mellitus. Since voglibose increases gastrointestinal motility and could thus affect absorption of concomitantly administered drugs, it was investigated whether or not voglibose modifies the pharmacodynamics and pharmacokinetics of warfarin, an oral anticoagulant frequently used in cardiovascular disorders likely to arise in diabetic patients. Twelve healthy male subjects were given individually adjusted doses of warfarin to reduce prothrombin time (Quick's method) to a value of about 30-40% of the normal range within the first 8 days. Then, the individual maintenance dose, given in the morning, was maintained until day 15. On study days 11-15, voglibose was co-administered per os in a dose of 5 mg t.i.d. The prothrombin time was determined on days 10 and 11 (reference) an
don days 15 and 16 (test), and the steady-state pharmacokinetic characteristics of the warfarin enantiomers were determined on days 10 (reference)
and 15 (test). The ratios test/reference were evaluated according to bioequivalence criteria. The equivalence ratio (test/reference) for the pharmacodynamic parameter prothrombin time was 0.97 and for the pharmacokinetic characteristics AUC0-24h,τ,ss: S-(-)-warfarin, 1.05; R-(+)-warfarin,1.01; and Cmax,ss: S-(-)-warfarin,1.08; R-(+)-warfarin, 1.04. All parameters were within the predetd. accepted range of 0.7-1.43 (pharmacodynamics) or 0.8-1.25 (pharmacokinetics), thus fulfilling equivalence criteria. Voglibose modified neither the pharmacodynamics nor the pharmacokinetic of warfarin under steady-state conditions. Concomitant treatment was well tolerated nd has been proven to be safe for further clin. use.
IT 83480-29-9, Voglibose
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(α-glucosidase inhibitor voglibose (AO-128) does not change warfarin pharmacodynamics or pharmacokinetics)
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

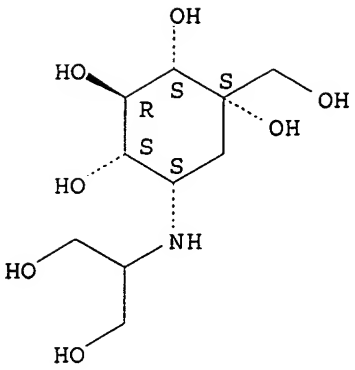
Absolute stereochemistry.



RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

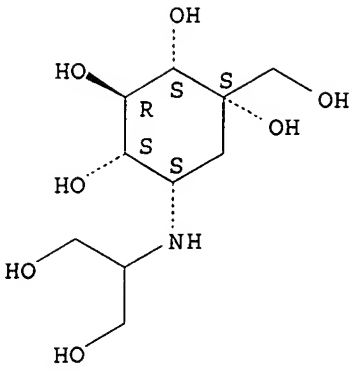
L5 ANSWER 49 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1997:672490 CAPLUS
DN 127:331640
TI Development of voglibose (Basen), an antidiabetic agent
AU Fukase, Hiroshi
CS Pharm. Res. Div., Takeda Chem. Ind., Ltd., Osaka, 532, Japan
SO Yuki Gosei Kagaku Kyokaishi (1997), 55(10), 920-925
CODEN: YGKKAE; ISSN: 0037-9980
PB Yuki Gosei Kagaku Kyokai
DT Journal; General Review
LA Japanese
AB A review with 6 refs. Voglibose (Basen®), having more potent disaccharidase inhibitory activity against maltase and sucrase than do naturally occurring pseudo-oligosaccharide α-glucosidase inhibitors, has been developed for the treatment of diabetes mellitus as the blood glucose ameliorating agent. Valiolamine, an important key compound for the preparation of N-substituted valiolamine derivs., was synthesized by stereoselective hydration of the C-C double bond of valienamine obtained by microbiol. degradation of validamycins. Efficient and practical total synthesis of valiolamine starting from D-glucose has also been achieved. In animals and healthy volunteers, voglibose significantly reduced postprandial blood glucose concentration Clin. trials in patients with diabetes mellitus also demonstrated that voglibose improves post-partial glucose levels.
IT 83480-29-9P, Voglibose
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(development of antidiabetic voglibose (Basen))
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



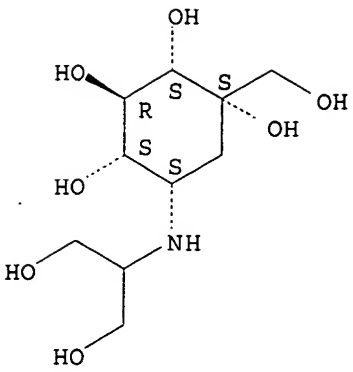
L5 ANSWER 50 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1997:555885 CAPLUS
DN 127:229493
TI The efficacy of voglibose on daily glycemic excursions assessed by the "J"-index in non-insulin dependent diabetes mellitus
AU Yoshioka, Keiji; Azukari, K.; Ashida, K.; Kasamatsu, Y.; Yokoo, S.; Yoshida, T.; Kondo, M.
CS First Department Internal Medicine, Matsuhita Memorial Hospital, Moriguchi, 570, Japan
SO Hormone and Metabolic Research (1997), 29(8), 407-408
CODEN: HMMRA2; ISSN: 0018-5043
PB Thieme
DT Journal
LA English
AB Levels of fasting blood plasma glucose (FPG) were 212 vs. 130.5 mg/dL and of HbA1c 10.5 vs. 8.9% in non-insulin dependent diabetes mellitus (NIDDM) patients 4 wk after strict diet therapy combined with hypoglycemic agents compared to the levels upon admission. After administration of voglibose (0.2 mg, 3 + daily) the "J"-index (J = 0.001 + (mean plasma glucose level + SD)2) declined from 59.7 to 34.6. Changes of "J"-index were mainly caused by the drop of postprandial blood plasma glucose values calculated 2 h after breakfast (248 vs. 178), 2 h after lunch (195 vs. 162), and 2 h after dinner (227 vs. 168 mg/dL). The M-value (calculated by the method of Schlichtkrull et al., 1995) decreased (66.4 vs. 31.1). Voglibose administration decreased the FPG levels (130.5 vs. 109.6 mg/dL).
IT 83480-29-9, Voglibose
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(voglibose effecting daily glycemic excursions assessed by "J"-index in non-insulin dependent diabetes mellitus)
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 51 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1997:428776 CAPLUS
DN 127:104196
TI Effects of administration of voglibose and pioglitazone on the functions of pancreatic islets of Langerhans in GK rats
AU Kato, Seika; Ishida, Hitoshi; Seino, Yutaka; Odaka, Hiroyuki; Ikeda, Hitoshi
CS Byotai Taisha Eiyogaku, Kyoto Daigaku, Kyoto, 606-01, Japan
SO Diabetes Frontier (1997), 8(3), 377
CODEN: DIFREZ; ISSN: 0915-6593
PB Medikaru Rebyusha
DT Journal
LA Japanese
AB Goto-Kakizaki (GK) male rats, model for non-insulin dependent diabetes mellitus, were fed on the diet containing 10 ppm voglibose (VO) form 8 to 13 wk of age. During this period, pioglitazone (PI) was administered at 1 mg/kg/day. GK rats fed on a normal diet were served as the control. Blood glucose (G) levels of the control, VO, PI and VO + PI groups before and 2 h after G load (1 g/kg, i.p.) at 13 wk of age were 186 and 275, 146 and 198, 151 and 210, and 144 and 203 mg/dL, resp. Quantities of G (16.7 mM)-stimulated insulin secretion, measured according to the batch incubation method, were significantly lower in the VO and VO + PI groups (18.99 and 27.80 μU/islet/30 min, resp.) than in the control group (8.05 μU/islet/30 min). Fasting plasma G levels and blood triglyceride levels at 13 wk of age were significantly decreased in the VO and VO + PI groups than in the control group. Total cholesterol levels were also decreased in the VO + PI groups than in the control group. Insulin contents in the Langerhans' islands of the control, VO, and VO + PI groups were 32.5, 66.2, and 65.1 ng/islet, resp. These results suggest that GK rats treated with VO alone or combined with PI preserve the functions of pancreatic islets of Langerhans.
IT 83480-29-9, Voglibose
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(effects of voglibose and pioglitazone on blood glucose, insulin, triglyceride, and pancreatic islets of Langerhans in GK rats)
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 52 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1997:134768 CAPLUS
DN 126:148504
TI Pharmaceutical composition for use in treatment of diabetes
IN Ikeda, Hitoshi; Sohda, Takashi; Odaka, Hiroyuki
PA Takeda Chemical Industries, Ltd., Japan
SO Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 749751	A2	19961227	EP 1996-304570	19960620
	EP 749751	A3	19970416		
	R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
	TW 438587	B	20010607	TW 1996-85107042	19960612
	AU 9656034	A1	19970109	AU 1996-56034	19960618
	AU 723097	B2	20000817		
	JP 09067271	A2	19970311	JP 1996-156725	19960618
	JP 3148973	B2	20010326		
	JP 10167986	A2	19980623	JP 1997-360756	19960618
	NO 9602606	A	19961223	NO 1996-2606	19960619
	NO 313226	B1	20020902		
	CN 1145783	A	19970326	CN 1996-111063	19960619
	ZA 9605190	A	19971219	ZA 1996-5190	19960619
	US 5952356	A	19990914	US 1996-667979	19960619
	RU 2198682	C2	20030220	RU 1996-111958	19960619
	CZ 291624	B6	20030416	CZ 1996-1811	19960619
	RU 2223760	C2	20040220	RU 2002-104459	19960619
	CN 1530105	A	20040922	CN 2002-2002149131	19960619
	CN 1530106	A	20040922	CN 2002-2002149132	19960619
	CA 2179584	AA	19961221	CA 1996-2179584	19960620
	CA 2531834	AA	19961221	CA 1996-2531834	19960620
	CA 2533845	AA	19961221	CA 1996-2533845	19960620
	EP 861666	A2	19980902	EP 1998-200252	19960620
	EP 861666	A3	19990210		
	EP 861666	B1	20031217		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
	EP 1174135	A2	20020123	EP 2001-203170	19960620
	EP 1174135	A3	20020619		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI				
	AT 256463	E	20040115	AT 1998-200252	19960620
	PT 861666	T	20040531	PT 1998-200252	19960620
	ES 2212208	T3	20040716	ES 1998-200252	19960620
	US 5965584	A	19991012	US 1998-57465	19980409
	HK 1010484	A1	20041126	HK 1998-111476	19981022

	US 6150383	A	20001121	US 1999-280710	19990330
	US 6121295	A	20000919	US 1999-303496	19990430
	US 6133293	A	20001017	US 1999-302469	19990430
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	US 6156773	A	20001205	US 1999-303497	19990430
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	AU 741226	B2	20011129	AU 2000-40867	20000615
	US 6211205	B1	20010403	US 2000-606176	20000629
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	US 6288090	B1	20010911	US 2000-610992	20000706
	US 6239153	B1	20010529	US 2000-618636	20000718
	US 6251924	B1	20010626	US 2000-618635	20000718
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	US 6274605	B1	20010814	US 2000-722330	20001122
	US 6271243	B1	20010807	US 2000-722597	20001128
	US 6277869	B1	20010821	US 2000-722291	20001128
	US 2002002186	A1	20020103	US 2001-907768	20010719
	US 2002042434	A1	20020411	US 2001-973689	20011011
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	US 2002123512	A1	20020905	US 2002-84479	20020228
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	US 2002128289	A1	20020912	US 2002-95453	20020313
	US 6599923	B2	20030729		
	CZ 292093	B6	20030716	CZ 2002-2453	20020715
	US 2003216443	A1	20031120	US 2003-462793	20030617
	US 6911459	B2	20050628		
	US 2004266830	A1	20041230	US 2004-898316	20040726
	US 2005054685	A1	20050310	US 2004-937494	20040910
PRAI	JP 1995-153500	A	19950620		
	JP 1996-156725	A3	19960618		
	RU 1996-111958	A	19960619		
	US 1996-667979	A3	19960619		
	CA 1996-2179584	A3	19960620		
	EP 1996-304570	A3	19960620		
	EP 1998-200252	A3	19960620		
	US 1998-27189	B1	19980220		
	US 1998-57465	A3	19980409		
	US 1999-280710	A3	19990330		
	US 1999-302468	A3	19990430		
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	US 1999-303497	A3	19990430		
	US 1999-453521	A3	19991203		
	US 1999-468835	B1	19991222		

	US 2000-605704	A3	20000629
	US 2000-657785	B1	20000908
	US 2001-907768	B1	20010719
	US 2001-973689	A3	20011011
	US 2002-95453	A3	20020313
	US 2003-462793	A3	20030617

OS MARPAT 126:148504

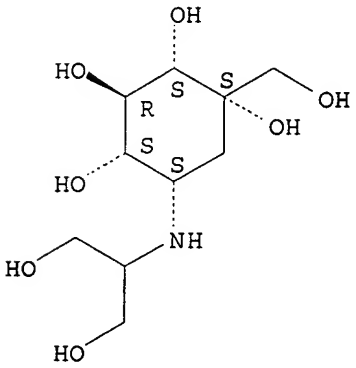
AB Pharmaceutical composition which comprises an insulin sensitivity enhancer in combination with other antidiabetics differing from the enhancer in the mechanism of action, which shows a potent depressive effect on diabetic hyperglycemia and is useful for prophylaxis and treatment of diabetes. As an example, rats given pioglitazone hydrochloride (oral, 3 mg/kg/day) and/or glibenclamide (an insulin secretion enhancer-- oral 3 mg/kg/day) for 7 days. The increase of blood sugar following glucose loading was remarkably inhibited by the combined administration of pioglitazone and glibenclamide as compared with the administration of the drug alone.

IT 83480-29-9, Voglibose
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(α-glucosidase inhibitor; pharmaceutical composition for use in treatment of diabetes)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 53 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1996:350662 CAPLUS

DN 125:25993

TI Improvement of insulin sensitivity and dyslipidemia with a new α-glucosidase inhibitor, voglibose, in nondiabetic hyperinsulinemic subjects

AU Shinozaki, Kazuya; Suzuki, Masaaki; Ikebuchi, Motoyoshi; Hirose, Junya; Hara, Yasushi; Harano, Yutaka

CS Dep. Med., Natl. Cardiovascular Cent., Osaka, Japan

SO Metabolism, Clinical and Experimental (1996), 45(6), 731-737
CODEN: METAAJ; ISSN: 0026-0495

PB Saunders

DT Journal

LA English

AB This study was undertaken to investigate the effect of voglibose , a new α-glucosidase inhibitor, on glucose and lipid metabolism in nondiabetic hyperinsulinemic subjects. Sixteen nondiabetic subjects with hyperinsulinemia participating in the study. They were divided into two groups of eight subjects with normal (NGT) and impaired (IGT) glucose tolerance. A meal tolerance test and a 75-g oral glucose tolerance test (OGTT) were performed at the beginning (baseline phase) and end (treatment phase) of the 12-wk treatment. Serum lipid levels were measured every 4

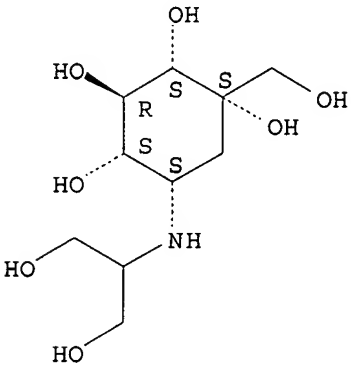
wk throughout the treatment phase and follow-up phase (8 wk). All patients received 1 0.2-mg tablet of voglibose before each test meal (3 tablets per day). We also measured insulin sensitivity using a steady-state plasma glucose (SSPG) method in eight normotensive hyperinsulinemic subjects and in eight age- and body mass index (BMI)-matched control subjects before and after the drug treatment. Voglibose significantly decreased the responses of plasma glucose and insulin on the meal tolerance test. The area under the curve for 2-h insulin during the 75-g OGTT decreased after treatment, whereas that for 2-h glucose did not change before and after treatment. SSPG was reduced after treatment, indicating improvement of insulin sensitivity. Moreover, treatment with voglibose resulted in a significant decline of triglyceride level and an elevation of high-d. lipoprotein (HDL) cholesterol and apolipoprotein A-I. These values returned to near-baseline levels after the drug was discontinued. Consequently, we conclude that this agent not only has a direct hypoglycemic effect through decreased absorption of carbohydrate, but also a hypoinsulinemic and hypolipidemic effect via improved insulin sensitivity.

IT 83480-29-9, Voglibose
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(improvement of insulin sensitivity and dyslipidemia with a new α-glucosidase inhibitor, voglibose, in nondiabetic hyperinsulinemic humans)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 54 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1994:612976 CAPLUS

DN 121:212976

TI Tablets with improved abrasion resistance and method to produce them

IN Matoba, Hiroshi; Koyama, Hiroyoshi; Kikuta, Junichi

PA Takeda Chemical Industries, Ltd., Japan

SO Eur. Pat. Appl., 17 pp.
CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 610854	A1	19940817	EP 1994-101809	19940207
	EP 610854	B1	20000419		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE

	JP 06293634	A2	19941021	JP 1994-23269	19940124
	JP 2647338	B2	19970827		
	US 5456920	A	19951010	US 1994-187908	19940128
	NO 9400373	A	19940811	NO 1994-373	19940204
	AT 191846	E	20000515	AT 1994-101809	19940207
	CN 1106652	A	19950816	CN 1994-101367	19940208
	CA 2115308	AA	19940811	CA 1994-2115308	19940209
	CA 2115308	C	20040511		
	FI 9400585	A	19940811	FI 1994-585	19940209
PRAI	JP 1993-45958	A	19930210		

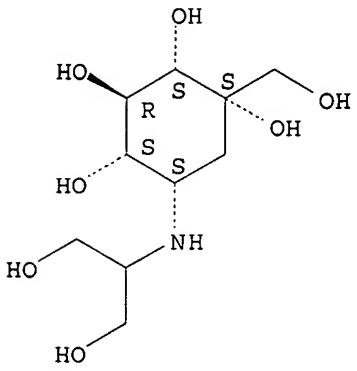
AB A compression-moldable composition comprising an active ingredient, an excipient, and an oily or fatty substance having a m.p. of .apprx.20-90° is compression molded into uncoated tablets without coating to improve the abrasion resistance. The oily or fatty substance includes a higher fatty acid or a salt thereof, a wax, a fatty acid ester, a hardened oil, a polyalkylene oxide, etc., in an amount of 0.01-10 weight%. The composition may comprise (1) a granulated powder containing the active ingredient and the excipient, and the powdery or granular oily or fatty substance having a lower m.p., or (2) a granulated powder containing the active ingredient, the excipient, and the oily or fatty substance. Compression molding of the composition improves the abrasion resistance of the tablet and inhibits the development of powder by wearing or abrasion even when the oily or fatty substance is used in a small amount of 0.1-0.5 weight%. Thus, 2-(7-chloro-1,8-naphthyridin-2-yl)-3-(1,4-dioxa-8-azaspiro[4.5]dec-8-yl)carbonylmethylisoindolin-1-one 32.0 was granulated with lactose 756.8, corn starch 144.0, and 6% aqueous hydroxypropylcellulose 451.2 g at 70° in a fluidized bed, the mixture was dried and comminuted, and 840.0 g was combined with PEG 6000 3.6 and Mg stearate 66.4 g and compression molded in a rotary tablet machine to form 130.0-mg tablets 2.5 mm thick. Very little powder was formed by shaking the tablets for 30 min.

IT 83480-29-9, Voglibose
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tablets with improved abrasion resistance containing oils or fats)

RN 83480-29-9 CAPLUS

CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 55 OF 55 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1993:650258 CAPLUS

DN 119:250258

TI Valiolamine and its N-substituted derivatives. α-D-glucosidase inhibitors. From validamycins to voglibose (AO-128), and antidiabetic agent

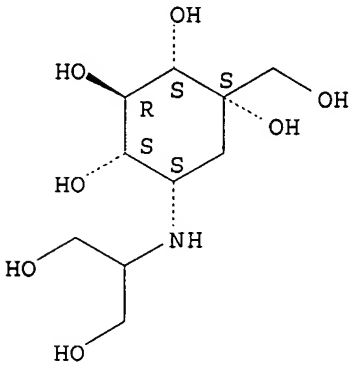
AU Horii, Satoshi

CS Pharm. Res. Div., Takeda Chem. Ind. Ltd., Osaka, 532, Japan

SO Takeda Kenkyushoho (1993), 52, 1-26

CODEN: TAKHAA; ISSN: 0371-5167
DT Journal; General Review
LA English
AB A review with 41 refs. on pseudo-amino sugars and their α-D-glucosidase inhibitory activity, stereoselective conversion of valienamine and validamine into valiolamine, preparation of N-substituted valiolamines and their α-D-glucosidase inhibitory activity, synthesis of valiolamine and voglibose (AO-128) from D-glucose, and total synthesis of validoxylamine G and validamycin G.
IT 83480-29-9, Voglibose
RL: RCT (Reactant); RACT (Reactant or reagent))
RN 83480-29-9 CAPLUS
CN D-epi-Inositol, 3,4-dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	366.19	533.78

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-51.00	-51.00

FILE 'REGISTRY' ENTERED AT 15:01:47 ON 08 AUG 2006

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 7 AUG 2006 HIGHEST RN 899508-12-4
DICTIONARY FILE UPDATES: 7 AUG 2006 HIGHEST RN 899508-12-4

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TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of

experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

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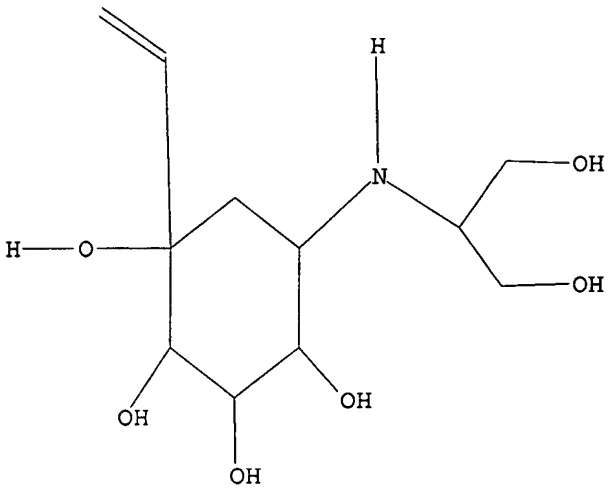
L7 STR



Structure attributes must be viewed using STN Express query preparation.

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BATCH **COMPLETE**
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PROJECTED ANSWERS: 0 TO 0

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L5           55 S L4 AND (METHOD OR PROCESS OR PRODUCTION OR SYNTHE? OR MAKING)
L6           13 S L5 AND OXID?

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L10           0 S L7 EXACT
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            187 VOGLIBOSE
L12           1 L11 AND VOGLIBOSE

=> dis l12 bib abs

L12  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2003:777746  CAPLUS <<LOGINID::20060808>>
DN   139:277115
TI   Process for preparation of voglibose
IN   Shogaki, Takeshi; Kakita, Takao; Yagi, Suguru
PA   Sawai Pharmaceutical Co., Ltd., Japan
SO   PCT Int. Appl., 26 pp.
     CODEN: PIXXD2
DT   Patent
LA   Japanese
FAN.CNT 1
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PI   WO 2003080561         A1     20031002    WO 2002-JP10687         20021015
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             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL,
             PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
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     AU 2002344083         A1     20031008    AU 2002-344083          20021015
     US 2005165257         A1     20050728    US 2003-509059          20021015
PRAI JP 2002-88321         A      20020327
     WO 2002-JP10687       W      20021015
OS   CASREACT 139:277115; MARPAT 139:277115
GI
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention provides a process by which voglibose can be safely and easily prepared at a low cost; intermediates favorably usable in the process; and a process for preparation of the intermediates, specifically, inositol derivs. represented by the general formula (I) (wherein Prt is a hydroxyl-protecting group); a process for the preparation of the inositol derivs. which comprises dihydroxyaminating a cyclohexanone compound represented by the general formula (II) (wherein Prt is as defined above) with a dihydroxyaminating agent and a reducing agent; and a process for the preparation of voglibose represented by formula (III) which comprises oxidizing an inositol derivative of the general formula I and deblocking the resulting inositol compound Voglibose is an α-glucosidase inhibitor and useful for the treatment of diabetes. Thus, a suspension of 2.0 g Me 6-deoxy-2,3,4-tri-O-benzyl-α-D-xylo-5-hexenopyranoside in a mixture of 60 mL dioxane and 30 mL H2O was heated in the presence of 39 mg PdCl2 at 45° with stirring to give, after workup and crystallization from hexane, 72.4% [2S-(2α,3β,4α,5.alp ha.β)]-5-hydroxy-2,3,4-tris(benzyloxy)cyclohexanone (IV) which (4.33 g) was dissolved in 90 mL toluene, cooled to -78°, treated dropwise

with a THF solution of 1.0 M vinylmagnesium bromide (50 mL), stirred at -78° for 2 h and at room temperature for 1 h, and carefully treated with 100 mL 1 M aqueous HCl solution, to give after workup and silica gel chromatog., a mixture of 3-deoxy-2-C-ethenyl-1,5,6-tri-O-benzyl-D-epi-inositol and 3-deoxy-2-C-ethenyl-1,5,6-tri-O-benzyl-D-myo-inositol (V) in 65.8% yield. V (2.99 g) was dissolved in 15 mL DMSO and 5.43 mL Et3N, treated dropwise with a solution of 3.10 g sulfur trioxide-pyridine complex in 15 mL DMSO, stirred at room temperature for 1 h to give, after workup and silica gel chromatog., 83.7% II (Prt = benzyl) which (1.50 g) was stirred with 2-amino-1,3-propanediol in 25 mL dry MeOH at room temperature for 20 h, treated with 742 mg NaBH4 under ice-cooling, and stirred at room temperature for 16 h to give, after workup and silica gel chromatog., 72.6% III (Prt = benzyl) (VI). A solution of 700 mg VI in 30 mL CH2Cl2/MeOH (4/1) underwent ozonolysis at -78° for .apprx.4 h, treated with 198 mg NaBH4, stirred at room temperature for 1 h, and acidified to pH 4 by adding 1 M aqueous HCl solution to give, after silica gel chromatog., 85.5% I (Prt = benzyl) which (100 mg) was dissolve din 1.9 mL MeOH, successively treated with 0.1 mL 90% formic acid and 20 mg palladium black, stirred at 60° for 6 h, and suction-filtered to remove the catalyst followed by washing the catalyst with 3 mL MeOH/H2O (1/1). Evaporation of the combined solvent from the filtrate and the washing under reduced pressure, column chromatog. purification using Dowex 50WX8 and Amberlite CG-50, and crystallization from ethanol gave 65.0% III (voglibose).

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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=> s Kakita Takao/AU
L13          23 KAKITA TAKAO/AU

=> s l13 and voglibose
            187 VOGLIBOSE
L14           2 L13 AND VOGLIBOSE

=> dis l14 1-2 bib abs

L14  ANSWER 1 OF 2 · CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2003:777746  CAPLUS <<LOGINID::20060808>>
DN   139:277115
TI   Process for preparation of voglibose
IN   Shogaki, Takeshi; Kakita, Takao; Yagi, Suguru
PA   Sawai Pharmaceutical Co., Ltd., Japan
SO   PCT Int. Appl., 26 pp.
     CODEN: PIXXD2
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.           KIND   DATE        APPLICATION NO.          DATE
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PI   WO 2003080561         A1    20031002    WO 2002-JP10687          20021015
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	US 2005165257	A1	20050728	US 2003-509059	20021015
PRAI	JP 2002-88321	A	20020327		
	WO 2002-JP10687	W	20021015		

OS CASREACT 139:277115; MARPAT 139:277115
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention provides a process by which voglibose can be safely and easily prepared at a low cost; intermediates favorably usable in the process; and a process for preparation of the intermediates, specifically, inositol derivs. represented by the general formula (I) (wherein Prt is a hydroxyl-protecting group); a process for the preparation of the inositol derivs. which comprises dihydroxyaminating a cyclohexanone compound represented by the general formula (II) (wherein Prt is as defined above) with a dihydroxyaminating agent and a reducing agent; and a process for the preparation of voglibose represented by formula (III) which comprises oxidizing an inositol derivative of the general formula I and deblocking the resulting inositol compound Voglibose is an α-glucosidase inhibitor and useful for the treatment of diabetes. Thus, a suspension of 2.0 g Me 6-deoxy-2,3,4-tri-O-benzyl-α-D-xylo-5-hexenopyranoside in a mixture of 60 mL dioxane and 30 mL H2O was heated in the presence of 39 mg PdCl2 at 45° with stirring to give, after workup and crystallization from hexane, 72.4% [2S-(2α,3β,4α,5.alpha.β)]-5-hydroxy-2,3,4-tris(benzyloxy)cyclohexanone (IV) which (4.33 g) was dissolved in 90 mL toluene, cooled to -78°, treated dropwise with a THF solution of 1.0 M vinylmagnesium bromide (50 mL), stirred at -78° for 2 h and at room temperature for 1 h, and carefully treated with 100 mL 1 M aqueous HCl solution, to give after workup and silica gel chromatog., a mixture of 3-deoxy-2-C-ethenyl-1,5,6-tri-O-benzyl-D-epi-inositol and 3-deoxy-2-C-ethenyl-1,5,6-tri-O-benzyl-D-myo-inositol (V) in 65.8% yield. V (2.99 g) was dissolved in 15 mL DMSO and 5.43 mL Et3N, treated dropwise with a solution of 3.10 g sulfur trioxide-pyridine complex in 15 mL DMSO, stirred at room temperature for 1 h to give, after workup and silica gel chromatog., 83.7% II (Prt = benzyl) which (1.50 g) was stirred with 2-amino-1,3-propanediol in 25 mL dry MeOH at room temperature for 20 h, treated with 742 mg NaBH4 under ice-cooling, and stirred at room temperature for 16 h to give, after workup and silica gel chromatog., 72.6% III (Prt = benzyl) (VI). A solution of 700 mg VI in 30 mL CH2Cl2/MeOH (4/1) underwent ozonolysis at -78° for .apprx.4 h, treated with 198 mg NaBH4, stirred at room temperature for 1 h, and acidified to pH 4 by adding 1 M aqueous HCl solution to give, after silica gel chromatog., 85.5% I (Prt = benzyl) which (100 mg) was dissolve din 1.9 mL MeOH, successively treated with 0.1 mL 90% formic acid and 20 mg palladium black, stirred at 60° for 6 h, and suction-filtered to remove the catalyst followed by washing the catalyst with 3 mL MeOH/H2O (1/1). Evaporation of the combined solvent from the filtrate and the washing under reduced pressure, column chromatog. purification using Dowex 50WX8 and Amberlite CG-50, and crystallization from ethanol gave 65.0% III (voglibose).

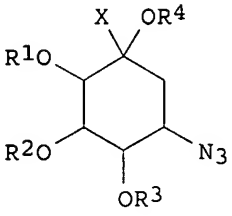
RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2003:386729 CAPLUS <<LOGINID::20060808>>
DN 138:402036
TI Preparation of valiolamine and its intermediates

IN Masagaki, Takeshi; Yagi, Takashi; Kakita, Takao
PA Sawai Pharmaceutical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003146957	A2	20030521	JP 2001-345259	20011109
PRAI	JP 2001-345259		20011109		

OS MARPAT 138:402036
GI



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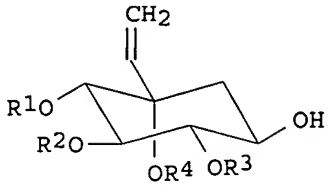
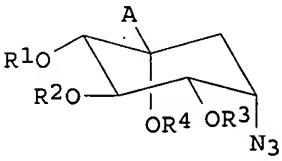


III



IV

AB Cyclohexane derivs. I (R1-R4 = H, protective group; X = CH:CH2, CH2OH), useful as intermediates for valiolamine (II), are claimed. Also claimed is a method for preparation of II by (1) azidation of alc. III (R1-R4 = H, protective group), (2) oxidation of the resulting IV (A = CH:CH2; R1-R4 = same as in III), and (3) reduction of the resulting IV (A = CH2OH; R1-R4 = same as above). Preparation of II from Me 6-deoxy-2,3,4-tris-O-(phenylmethyl)-α-D-xylo-5-hexenopyranoside with 5 steps was shown. Preparation of voglibose from II was also shown.

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=> s Yagi Suguru/AU
L15          8 YAGI SUGURU/AU

=> s l15 and voglibose
           187 VOGLIBOSE
L16          1 L15 AND VOGLIBOSE

=> dis l16 bib abs

L16  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2003:777746  CAPLUS <<LOGINID::20060808>>
DN   139:277115
TI   Process for preparation of voglibose
IN   Shogaki, Takeshi; Kakita, Takao; Yagi, Suguru
PA   Sawai Pharmaceutical Co., Ltd., Japan
SO   PCT Int. Appl., 26 pp.
     CODEN: PIXXD2
DT   Patent
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LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003080561	A1	20031002	WO 2002-JP10687	20021015
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2002344083	A1	20031008	AU 2002-344083	20021015
	US 2005165257	A1	20050728	US 2003-509059	20021015
PRAI	JP 2002-88321	A	20020327		
	WO 2002-JP10687	W	20021015		

OS CASREACT 139:277115; MARPAT 139:277115
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